HOSPITAL ABSTRACTS

A MONTHLY SURVEY OF WORLD LITERATURE

PREPARED BY THE DEPARTMENT OF HEALTH

AND SOCIAL SECURITY

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HOSPITAL ABSTRACTS

Vol. 16 January 1976 No. 1

HOSPITALS IN OTHER COUNTRIES

1. ALFORD, R. R. **Health care politics: ideological and interest group barriers to reform.** Chicago & London, University of Chicago Press, 1975, xiv, 294pp. £6.85

After describing different theories of reform and alternative ways of studying health care politics, the author argues that the principal barriers to health care reform lie in the powers of structured interests and that this view of the politics of health care provides a broader explanation than one which focuses on specific innovations or pieces of legislation. To support his theory he analyses the reports of a series of investigations of New York City's hospitals and efforts to create neighbourhood family health centres. There follow a chapter which presents evidence that these experiences are not atypical, two chapters on the political economy of health care and a consideration of the consequences for health research.

2. LAWSON, J. S. **The anonymous administrator: a five-year experience as a medical administrator in Tasmania.** *Medical Journal of Australia*, Sydney, 1975, Sept. 13, vol. ii, no. 11, pp. 439-443.

The task of reorganizing and modernizing Tasmanian health and hospital services during the past five years is described. Surveys were conducted to determine the number of beds, quality of buildings, numbers and distribution of health staff, hospital use and the state of health of the community. Substantial improvement of the health services can be made despite a lack of authority to suit responsibility. The main factors needed are: (i) logical development of objectives; (ii) documentation of facts; (iii) a sense of timing for the introduction of new measures; (iv) the use of independent management consultants; and (v) finance. The major problems are the lack of incentives and the anonymous nature of the work in the service. The establishment of a health commission or board consisting of full- and part-time members responsible to Parliament may result in some improvements.

3. THOMAS, J. H. **Hospital stays to serve minority community.** *Hospital Progress*, St. Louis, 1975, Oct., vol. 56, no. 10, pp. 38-40.

St. Bernard Hospital, Chicago, has, in spite of much advice favouring relocation to the suburbs of the city, begun an $11 million expansion project on its present site in the centre of the city. The hospital retained the site in the inner city in view of the closure of a near-by hospital, the need for health care in the service area, and the high mortality and morbidity figures. Problems of attracting additional medical staff, maintaining an adequate complement of professional staff coupled with the need to maintain a financially sound system were analysed, and short- and long-term schemes were set up to deal with the problems. The capacity of the emergency department has

been enlarged and there are several programmes of preventive medicine being carried out in the community. The hospital has proved that it can remain financially viable whilst serving a low socio-economic, inner-city population, and has inspired greater confidence in the community by remaining in the inner city and subsequently expanding its work.

4. GAUTHE, G., DELFORGE, J. and DINGREMONT, P. L'hôpital local de Saint-Valery-sur-Somme. **[The local hospital of Saint-Valery-sur-Somme.]** *Techniques Hospitalières*, Paris, 1975, June/July, vol. 31, nos. 357/358, pp. 46-57.

Saint-Valery-sur-Somme is a popular tourist resort, whose normal population of 35,000 rises to 80,000 in the summer creating problems for the local hospital. Since 1965 the hospital has been extended and modernized without outside help and now has 286 beds, including 222 for the elderly. It has a small operating theatre for minor surgery and its own ambulance. It is staffed by six general practitioners. Some services are provided by the regional hospital centre in Amiens, which it relieves of a considerable work load. Rural hospitals like this one satisfy many of the needs of local patients near their homes at a relatively low cost and by staff familiar to them. Such hospitals must have sufficient beds, equipment and staff. It is desirable to have a house physician, social workers on the premises, and specialists on call for consultation.

PLANNING, DESIGN AND CONSTRUCTION

See also Abstract No. 120

5. Construction des établissements sanitaires et sociaux. 2e édition. **[Construction of health and social institutions. 2nd edition.]** Paris, Le Moniteur des Travaux Publics et du Bâtiment, 1975, 442pp. 128F.

This collection of French laws, regulations and official circulars is divided into four parts: (i) general; (ii) the different stages of a project; (iii) financial standards, security, authorization of the establishment or extension of private facilities, and devolution; and (iv) technical standards for the various types of facility, e.g. hospitals, psychiatric hospitals, etc.

SELECTION OF SITE

See Abstract No. 3

HOSPITAL DESIGN

6. **Computerized space planning.** *Modern Healthcare*, Chicago, 1975, Oct., vol. 4, no. 4, pp. 45-48.

Medical Planning Associates (MPA), Malibu, Calif., has developed a program that allows hospitals to assess their needs and then turn to a data bank to determine the space requirements. The computer program was compiled over several years using

techniques developed by MPA during consultation. The first step into the system is the completion of up to 80 highly detailed questionnaires which provide, in numerical form, the framework upon which the recommendations are built. The completion of the questionnaires forces hospital management to consider hospital operations in great detail. The questionnaires are then used by MPA as computer input for the program. The total cost of the program is $2,500, and the average cost per department is $120. A survey of less than 20 departments of a hospital would not bring out the interaction between hospital departments and the services. The program has been applied to more than 30 projects, and is used as a means of determining optimal space and manpower use.

DESIGN OF INDIVIDUAL GENERAL HOSPITALS

7. **Bangor's Eastern Maine Center.** *Modern Healthcare*, Chicago, 1975, Sept., vol. 4, no. 3, pp. 16q-16u.

The new 367-bed Eastern Maine Medical Center, Bangor, occupied in October 1974, is contemporary in design and flavour. The master plan established a new circulation spine which connects existing facilities to a new building and its vertical circulation core. Ancillary services may be expanded on a horizontal plane, clinical services vertically. The two-storey structure above the emergency and out-patient departments can accommodate a new patient care tower. The grouping of services is described. The building is constructed of reinforced concrete columns and waffle slabs. Two plans and four external and two internal photographs are included.

8. TURNER, T. N. **Best buy hospital. 2. Use of the central treatment room.** *Nursing Times*, London, 1975, Sept. 4, vol. 71, no. 36, pp. 1414-1416.

A plan of the central treatment area at the West Suffolk Hospital, Bury St. Edmunds, is illustrated and described [see also *Hospital Abstracts*, Vol. 15, Abstract 1535]. Here dressing and minor surgery is carried out for both day and in-patients. The area has five staff, one per treatment room but in-patients are treated by their own ward staff and the work flow is controlled by a receptionist. The system has been running for one year and has proved successful despite initial apprehension of the staff. It has not yet been possible to assess whether there have been any real savings compared to traditional treatment rooms though building costs were reduced.

9. WIPF, M., BESMER, H. and PFAMMATTER, A. Das Regionalspital St. Maria Visp. **[St. Maria Regional Hospital, Visp.]** *Veska*, Aarau, 1975, Aug., vol. 39, no. 8, pp. 363-377.

Details are given of the planning and erection of the new and reconstructed buildings at St. Maria Hospital, Visp, from the decision to initiate the work in 1966 to its completion in 1973. It has two basements, ground floor and five other floors; details are given of the facilities on each and plans are included of basement, ground and first to fourth floors. Nursing units have 20, 27 or 36 beds. Details of installations and equipment are given. There is a heliport on the roof and the basements contain a

270-bed emergency hospital and refuge for 300 persons (normally used as a garage). Details are also given of the hospital's staff.

10. 'Pieter Pauw Ziekenhuis' en verpleeghuis 'De Pauwenhof' geopend: uniek gelegen ziekenhuiscomplex telt 268 bedden en vergt investering van 43 miljoen. **[Opening of the Pieter Pauw Hospital and the Pauwenhof nursing home: uniquely situated hospital having 268 beds and costing fl.43 million.]** *Technische Gids voor Ziekenhuis en Instelling*, Amsterdam, 1975, Sept. 30, vol. 44, no. 1085, pp. 739, 741, 743.

This 268-bed complex (architects: Duintjer Istha Kramer Van Willigen B.V., Amsterdam) comprises a general hospital with 175 beds and eight cots, linked by corridors to a 93-bed nursing home for psychiatrically disturbed elderly patients, an energy block and four 16-room staff residences. Each nursing unit has about 30 beds in rooms with up to six beds. The treatment department accommodates a large polyclinic with separated waiting rooms, a well-equipped ear, nose and throat clinic, laboratory and X-ray unit. The operating suite houses four theatres, a special section for cardiac treatment and the central sterile supply unit. A six-bed haemodialysis unit is specially equipped to deal with patients on holiday. A special playground has been donated to the children's department. The nursing home has its own staff, four-bed wards, a large recreation room and shares the main physiotherapy department. The central kitchen uses a régéthermic system for serving meals. Four photographs, but no plans, are included.

DESIGN OF SPECIAL HOSPITALS OR UNITS

See also Abstract Nos. 10 (Psycho-geriatric), 138 (Long-stay)

11. Zesde verpleeghuis van vereniging 'Het Zonnehuis' te Amstelveen. **[Sixth nursing home of the Zonnehuis Foundation at Amstelveen.]** *Technische Gids voor Ziekenhuis en Instelling*, Amsterdam, 1975, Aug. 5, vol. 44, nos. 1080/1081, pp. 555, 557, 559.

This nursing home (architects: R. H. Fledderus, Rotterdam, and Mulder and Tielman, Rotterdam) provides for 207 chronically ill and 84 psychiatrically disturbed elderly patients. The emphasis is on homely nursing care rather than on the medical aspect. The building complex has its service blocks in the centre, a three-storey, L-shaped block for the chronically ill on the west side, and on the east side three single-storey pavilions for the elderly plus a 12-storey block for staff accommodation. Each floor on each wing of the L-shaped block has 34 to 35 beds (six four-bed, four double and two single rooms and an isolation room) and a lounge. A wide connecting passage leading to the pavilions has administrative offices on the south side and the staff restaurant and domestic offices on the north side of the ground floor. Over these are the medical and paramedical services, including a physiotherapy department. The pavilions house 28 patients each and have a double corridor layout with service rooms in the centre and two units each of 15 beds (six four-bedded and two double rooms plus an isolation room). Corridors are wide for easy movement. The staff block can accommodate 143 persons in single room flatlets and has a large recreation room and sun terrace. Five photographs but no plans are included.

ENGINEERING SERVICES

INSTALLATIONS IN GENERAL

12. BROOKS, R. A. **The new Charing Cross Hospital, Fulham—building services.** *Public Health Engineer*, London, 1975, May, no. 15, pp. 65-71.

This paper describes in some detail the building services at the new Charing Cross Hospital [see *Hospital Abstracts*, Vol. 14, Abstract 309], including services distribution and design principles, drainage, internal sanitation, incinerator and waste disposal, cold water supplies, distilled water, domestic hot water, medical gases, gas supplies, kitchen area, air-conditioning, chilled water, special purpose rooms, ventilation, boiler plant, steam distribution, sterilizers, space heating, electrical supplies, general and special lighting, general purpose rooms, communications, standby generation of electricity, transport and X-ray film conveyor.

ELECTRICAL INSTALLATIONS AND EQUIPMENT

See Abstract No. 79

COMMUNICATION SYSTEMS

See also Abstract No. 97

13. SIMON, B. Le système d'appels à l'hôpital. **[Hospital call systems.]** *Techniques Hospitalières*, Paris, 1975, Aug./Sept., vol. 31, nos. 359/360, pp. 77-78.

The author briefly reviews the various systems which enable a patient to summon a nurse to his bed-side. He believes that the best system is one in which the patient's call is answered at a central point and his message then relayed to a nurse or nursing auxiliary. Such a system provides immediate reassurance for the patient and makes the most economic use of the nursing staff's time. A photograph of the central switch desk for a system of this type, installed at the Ambroise-Paré Hospital, Boulogne, is included.

TRANSPORT IN GENERAL

See Abstract No. 100

MAINTENANCE OF BUILDINGS AND EQUIPMENT

See Abstract Nos. 33, 79

EQUIPMENT, FITTINGS, FURNITURE

INTERIOR DECORATION

14. **King's College Hospital—dining room.** *Interior Design*, Morden, Surrey, 1975, Nov., p. 582.

King's College Hospital, Denmark Hill, London, has converted some ground floor

offices into coffee rooms to alleviate the catering problem (architects: Lanchester and Lodge). The dining room and servery have been completely replanned to give a free flow self-service area catering for 170 people. Details of the furniture, carpeting, finishes and decoration in the servery, dining room and the special dining room for working lunches are given.

15. DUNN, A. **Hospitals should be coloured optimistic.** *Nursing Times*, London, 1975, Sept. 4, vol. 71, no. 36, pp. 1398-1399.

An architect, John Green, has designed a new form of hospital decoration, Plan S(42), which is cheap and easy to clean and maintain. It consists of a series of giant flowers from which suitable designs and colours are selected and they can be painted by a skilled display painter. A hospital at Craigavon, Northern Ireland, has used them and the new City Hospital, Belfast, intends to do so.

EQUIPMENT GENERALLY

16. ELLEFSEN, T. Forvaltningssystem for teknisk utstyr ved helseinstitusjoner. **[Medical technical equipment for general hospitals.]** *Norsk Sykehustidende*, Oslo, 1975, Sept., vol. 48, no. 9, pp. 173-176, 178.

The life cycle of a piece of equipment comprises: (i) planning (analysis of need, long-term planning, investment analysis, evaluation, and budgeting); (ii) procurement (tendering, purchase, installation, training, and payment); (iii) employment (use and maintenance); and (iv) replacement. The two most important standard forms necessary in such a cycle are the check-lists used by department heads in specifying proposals for new equipment, and suppliers' lists of equipment available. An equipment procurement committee, consisting of four or five members, one or two of whom are selected by the medical staff, should be appointed to advise the management on purchases. Their main responsibility is to call in and co-ordinate the requests of the various departments. A classified inventory of all equipment in the hospital must be available to promote flexibility and prevent double purchasing. Purchasing contracts must lay down clearly delivery date, supplier's responsibility for delivery and documentation, handing-over procedures, servicing and guarantees, training, and terms of payment. The technical department must be provided with the necessary electrical and mechanical instructions and must develop satisfactory checking and maintenance routines. When an item of equipment no longer meets requirements it can be handed on to an institution with a lower level of requirements, kept in reserve, or scrapped. The system described is now to be tried out in a hospital.

ELECTRONIC EQUIPMENT

See Abstract No. 117

STAFF GENERALLY

STAFF COMPLEMENTS

See Abstract No. 27

RECRUITMENT

See Abstract No. 28

SALARIES AND SUPERANNUATION

See Abstract No. 33

STAFF RELATIONS

17. VOLLEBERGH, J. J. A. Ziekenhuis en ondernemingsraad. **[Hospitals and industrial councils.]** *Ziekenhuis*, Utrecht, 1975, Sept. 3, vol. 5, no. 17, pp. 428-432.

The author argues that where industrial councils for hospitals are concerned the entire living and working environment, including the interests of the patient as the central figure, should be the starting point of a council's activities. The management and all staff should become involved and represented on the council, including the medical profession, for which the author would accept an advisory role. The ideal would be for a joint management plan to be drawn up, outlining a positive long- and short-term management policy. In practice the author recognizes the problems caused by the complicated structure of hospital management and the static nature of such a plan in a continually changing situation. The role of the council would be that of a catalyst towards participation and co-ordination of various groups and sections, aiming at integrated management. The question is posed how representative such councils are of those who have elected them and how in turn a council influences its electorate. The author would like to see more people involved via working groups and commissions, in other words more democratization in decision making. At present the author sees industrial councils for hospitals as advising and evaluating bodies. He suggests that they should be given more legal backing thus enabling them to play a critical and constructive role in hospital management in its widest sense.

STAFF TRAINING

See also Abstract Nos. 29-31, 55

18. BROWN, F. **English as a foreign language.** *Industrial and Commercial Training*, Northampton, 1975, Nov., vol. 7, no. 11, pp. 472-477.

The problem in recruiting foreign hospital staff is their inability to understand English adequately. The East Surrey Health District arranged for Redhill Technical College to provide a beginners' course in English as a foreign language, consisting of 20 90-minute lessons spread over 10 weeks, for the staff of the domestic department of one of the largest hospitals in the area. Twelve members of the staff (10 Spaniards and two Portuguese) agreed to attend the course in off-duty time. The course was well attended, and the results were pleasing, in spite of the need for 100 per cent exposure to the target language in a work situation which the staff were not obtaining.

19. La formation continue. **[Continuing education.]** *Hôpital à Paris*, Paris, 1975, July/Aug., no. 28, pp. 313-344.

This special issue on continuing education includes papers on: (i) continuing education of nurses; (ii) cost of training programmes; (iii) some examples; (iv) reflections on continuing training by a group of nurses; (v) continuing education and a new role for the nurse; and (vi) the establishment of an institute for the higher education of hospital professional staff.

20. LACASSIN, C. Réflexions sur la formation continue à l'hôpital. **[Thoughts on continuing education in the hospital.]** *Techniques Hospitalières*, Paris, 1975, Aug./Sept., vol. 31, nos. 359/360, pp. 64-70, 73-75.

The organization of continuing education for hospital staff is discussed in general terms in the light of the French law of 16 July 1971. Further training is necessary not only for nurses and paramedical personnel, but also for administrative and clerical staff, cleaners, cooks and ambulance drivers, so that staff at all levels can adapt to the changing needs of the hospital service, become better qualified, and improve their chances of promotion. A national association for the continuing education of hospital staff has been formed. It is hoped that a properly co-ordinated system will be developed. It is not as yet binding on hospital authorities to provide such training, however, and no special funds have been made available for this project.

STAFF WELFARE

21. KNILL-JONES, R. P., NEWMAN, B. J. and SPENCE, A. A. **Anaesthetic practice and pregnancy: controlled survey of male anaesthetists in the United Kingdom.** *Lancet*, London, 1975, Oct. 25, vol. ii, pp. 807-809.

The obstetric histories of the marriages of 5,507 male doctors in the United Kingdom were surveyed to determine whether there was a relation between operating theatre work (exposure) and abnormalities in the obstetric history of their marriages. Paternal exposure did not appear to influence the overall abortion rate or the frequency of major congenital abnormality and involuntary infertility. The frequency of minor congenital abnormality in the children of exposed fathers was 3.09 per cent, compared with 2.35 per cent (non-exposed). Maternal exposure was associated with a 15.5 per cent frequency of abortion. Matching of exposed and non-exposed pregnancies with respect to birth order, maternal age, and smoking habits suggests that the risk of abortion may increase by 158 per cent to 271 per cent with maternal exposure.

22. HARRINGTON, J. M. and SHANNON, H. S. **Mortality study of pathologists and medical laboratory technicians.** *British Medical Journal*, London, 1975, Nov.8, vol. iv, pp. 329-332.

Membership lists of professional bodies were used to establish study populations of British pathologists from 1955 to 1973 and medical laboratory technicians from 1963 to 1973. The standardized mortality ratio for pathologists was 60 and for medical laboratory technicians 67. Twenty-seven of the 310 deaths were due to suicide. The most common cause of death among femaie technicians was suicide, and this may be

explained by easy access to lethal chemicals at work, resulting in a high proportion of deaths by poisoning. Suicide rates for pathologists exceed those of all male practitioners; similarly medical laboratory technicians have higher rates than laboratory technicians. This mortality study does not prove that occupational hazards affect mortality; no excess deaths were noted from infective conditions.

23. THOMAS, R. J. **Physical fitness—for a hospital staff.** *Hospital Administration in Canada*, Don Mills, Ont., 1975, Sept., vol. 17, no. 9, p. 24.

A physical fitness programme for medical staff, other staff and students at the Brandon (Man.) General Hospital and the Westman Laboratory was started in December 1974. The programme, on a 'co-ed' basis, takes place in the hospital gymnasium on Monday, Wednesday and Thursday from 1630 to 1800. About 25 to 30 people attend regularly. The programme consists of a series of stretching exercises for warming-up purposes, followed by jogging, repetitive callisthenics and 'warm down' movements. Initial assessments were carried out on each participant in conjunction with the YMCA. These are to be followed by further assessments to check on the progress of each individual. It is hoped to expand the programme later on to include physiotherapy and dietetics. The idea of the programme is not to develop supermen but to improve general fitness and efficiency.

SPECIAL CLASSES OF STAFF

ADMINISTRATIVE AND CLERICAL STAFF

24. GARAS, R. H. **Managerial obsolescence—a diagnostic and prognostic approach.** *Hospital Administration in Canada*, Don Mills, Ont., 1975, Sept., vol. 17, no. 9, pp. 17-20.

Obsolete managers are those who at one time performed satisfactorily but who have lost much of their former effectiveness. Obsolescence can be attributed to one or more of the following causes: (i) technological—failure to keep up with advances in his field; (ii) interpersonal; (iii) cultural—retaining old cultural values; (iv) political—loyalty to an old management team; and (v) economic. Obsolescence may be abrupt or gradual; it may relate to inability to cope with a changing work load or lack of flexibility to deal with new situations. Individual factors contributing to obsolescence are: (i) predisposition to obsolescence; (ii) emotional stress and disorder; (iii) inappropriate leadership style; and (iv) managerial ineffectiveness. Organizational factors contributing to managerial obsolescence are: (i) promoting individuals beyond their capacity; (ii) inadequate statement of objectives; (iii) insufficient counselling and guidance; (iv) denial of managerial obsolescence; (v) inflexible retirement programmes; (vi) narrow work assignments; and (vii) inappropriate leadership climate. Obsolescence must be measured and identified before remedial action begins, taking into account the factors listed. Job changes and development programmes are helpful ways of dealing with managerial obsolescence. Its prevention might be achieved by psychologically sophisticated approaches to the selection, performance measurements and development of managers.

MEDICAL STAFF

See also Abstract No. 34

25. PANNIER, R. De plaats van de geneesheer in het ziekenhuis. **[The place of the doctor in the hospital.]** *Archives Belges de Médecine Sociale, Hygiène, Médecine du Travail et Médecine Légale*, Bruxelles, 1975, Feb., vol. 33, no. 2, pp. 90-124; summaries in French and English pp. 91-93.

The author attempts to analyse the structure of the hospital in relation to its essential goals: high quality medical care, and proper treatment for every individual patient. The proper place of the doctor in the hospital can only be determined if: (i) the task of every professional group in the hospital is properly fixed; (ii) the means of collaboration and communication are well defined; (iii) the primary role of the doctor is accepted; and (iv) the authority of the medical staff is accepted. These points are discussed at length. The second part of the paper analyses the tasks of the different groups in the intramural arrangement of the hospital. The primary goals of the hospital would be more easily achieved if the present regime was replaced by a more democratically structured management composed of the representatives of the different groups. The author also discusses the role of groups not directly involved in the hospital, such as general practitioners, patients, insurance institutions, etc. [This abstract has been prepared from an English summary of the paper].

NURSING STAFF

See also Abstract Nos. 19, 90, 127

26. BULLOUGH, B. **Barriers to the nurse practitioner movement: problems of women in a woman's field.** *International Journal of Health Services*, New York, 1975, vol. 5, no. 2, pp. 225-233.

Historically the subordination of women and the segregation of nursing and medicine have helped to intensify the patterns between the two professions, in which the nurses are considered subordinates of the doctors. The training schemes and state laws have intensified this attitude, by restricting the roles of nurses. The ability to cope with the barriers put up between nursing and medicine has now proved a stumbling block, for although recent legislation and educational reform are encouraging nurses to take on greater responsibility, the traditional psychological barriers of subordination and subservience have not encouraged nurses to expand their talents to the full.

27. WANDEL, S. E. and HERSHEY, J. C. **A conceptual framework for nurse staffing management.** *Omega*, Oxford, 1975, Oct., vol. 3, no. 5, pp. 541-550.

A framework for nurse staffing management containing all interrelated management tasks that affect staff effectiveness is presented. The areas of nurse staffing that have been omitted in many of the previous nurse staffing studies are analysed with the aim of improving efficiency and performance whilst containing costs. These include systems design, forecasting, planning, co-ordination and an assessment of performance. Several previously ignored aspects of nurse staffing are examined and a consistent terminology is given. The various modes and techniques suggested are tools to augment

administrative judgment and may be used to: (i) bring out new aspects of problems; (ii) clarify objectives; (iii) suggest new ideas; and (iv) enable an assessment to be made of alternative courses of action.

28. BERGMAN, R. and others. **Work-life of the Israeli registered nurse.** *International Journal of Nursing Studies*, Oxford, 1975, vol. 12, no. 3, pp. 133-168.

A study was carried out to gather data on the work-life of Israeli registered nurses, and to find a feasible and reliable method of studying work-life in situations with limited resources. The expanding need for qualified nursing manpower and the importance of long-term planning are of major relevance in developing health services. A questionnaire was sent to 3,434 graduates of seven schools of nursing from 1933 to 1970. A 73 per cent return (1,976) was obtained. From the data obtained the study developed a nine-cell, two-dimensional chart of prototypes by work retention (long-haul, short-term) and age (26 to 35, 36 to 45, 46 to 60). A work-life table was computed from the data in the project which can be used for projecting manpower needs. This system is recommended as being feasible and reliable for studying nursing manpower in certain situations.

29. BROWN, D. E. **Community option: survey after one year's activities in Newham.** *Nursing Times*, London, 1975, Nov. 13, vol. 71, no. 46, occasional papers pp. 113-116; Nov. 20, vol. 71, no. 47, occasional papers, pp. 117-120.

The Newham School of Community Nursing has as its basic principle nurse education, not nurse training. The School undertakes district nurse training for State registered and State enrolled nurses and also has an integrated SEN/District course. Refresher courses are also given to practical work instructors, nursing attendants and community staff. The community health option course for those on a general nursing course, discussed in this paper, is the most recent of the School's schemes. Details of student selection, a documentation system, modules of training, finance and the curriculum are given.

30. DRUMM, P. Eleverne planlaegger selv uddannelsen og formulerer dens mål. **[Pupils plan their own training and formulate its aims.]** *Sygeplejersken*, København, 1975, Oct. 1, no. 40, pp. 4-9.

In answer to student nurses' demands in 1969 for a new method of assessing their performance during training, the Danish Department of Health offered to abandon the final examination certificate and assess students on the basis of their theory papers only. The students, however, demanded the right to decide what they wanted evaluated and whom it was to be evaluated by, i.e. a new process of evaluation for their final report. An eight-man committee was set up to decide on a standard grading system for the evaluation of a student nurse's training on her passing out from a particular ward, the new system to be assessed on various wards throughout the country for one year. One place where the system was tried was the 29-bed gynaecology ward at Sundby Hospital, under the collective charge of five nurses and training two or three nurses at a time. A form was distributed containing the aims of the course and a plan for the first two or three weeks. The students were expected to plan the aims, methods and content of the rest of their course in two- to three-week batches thereafter, calling on the staff for such assistance as they may require. An assessment of the system shows

that for various reasons none of the two-week teaching blocks actually ran as planned. Nor did students have the necessary training to be able to formulate aims and plan methods for their own instruction. It is therefore the intention to introduce the necessary methodology at an early stage of nursing training. The paper is illustrated with a copy of the first year syllabus, two two-week plans, and the entire Danish text of the new assessment regulations.

31. STRONG, P. G. **Psychiatric nurse education in Finland.** *Nursing Mirror*, Sutton, Surrey, 1975, Oct. 30, vol. 141, no. 18, pp. 71-73.

Psychiatric nursing forms a compulsory part of nurse education in Finland, and it is consequently difficult to isolate psychiatry from nursing education as a whole. The basic training for nurses lasts 2½ years, and consists of five terms of 20 weeks. The fourth term contains a provision for eight weeks' psychiatric experience. The colleges of nursing are independent of the hospitals and consequently the students are allocated essentially for practical experience to supplement formal teaching. There is a register of nurses who complete the basic training and a series of registers for each of the specialties at post-basic level. A high degree of specialization is practised by the nurse tutors, and any problems that arise are helped by counselling and the close supervision by tutors and ward staff. In order to be able to apply theory practically students are expected to become involved with the patients and the wards. The psychiatric training course is described. Preventive psychiatry has assumed increasing importance in Finland and a number of psychiatric centres have been established to act as a focal point for care in a district. Nurses are being trained for more responsibility in a wider sphere, and there is a possibility that nursing education will become integrated with the higher education structure.

OTHER PROFESSIONAL AND TECHNICAL STAFF

See also Abstract Nos. 56, 109

32. MORRIS, C. R. and DEEN, J. R. **Defining privileges for physician's assistants.** *Hospital Medical Staff*, Chicago, 1975, Oct., vol. 4, no. 10, pp. 8-11.

Integration of physician's assistants employed by medical staff into a community hospital presents a variety of problems. Lack of educational requirements puts the onus for screening and selection upon the staff of the hospital who are frequently without any guidance. The privileges/credentials committee of St. Paul Hospital, Dallas, now requires applicants to make formal applications in writing, and consequently each physician's assistant is considered on his own merit. The guidelines drawn up as a result of these applications and the assessments made may serve as a sample method for many other community hospitals faced with similar problems.

ANCILLARY STAFF

33. JEFFERIES, A. J. **Bonus schemes based on working groups.** *Cleaning and Maintenance*, London, 1975, Nov., vol. 23, no. 10, pp. 34-35, 37, 39.

The incentive bonus scheme devised for National Health Service (NHS) maintenance

staff differs from conventional incentive schemes used elsewhere in the NHS, since it leads to a bonus in stages and is based upon a large amount of standard craft data which eliminates the need for lengthy time studies to be carried out. It is a project designed to offer a significant increase in earnings in return for a realistic increase in productivity. Job times can be pre-measured for almost any job taking into account the siting, methods and materials used. The scheme is outlined, with the proviso that it cannot be implemented by the management without the full consent of the work force.

ORGANIZATION AND ADMINISTRATION

See also Abstract Nos. 25, 56, 125, 146

34. BLAIN, G. **The professional in a bureaucratic structure.** *Hospital Medical Staff*, Chicago, 1975, Oct., vol. 4, no. 10, pp. 1-6.

Recent developments in American hospital administration have led to a greater integration of professional staff into administration. The characteristics of professionalism and administration are analysed, and within the two frameworks the role of the professional is defined. The professional works in a team, is integrated into a formal structure, is a member of medical staff committees, is considered as a representative of the hospital and is unionized to protect his own interests, thus resulting in a change of values. Autonomy is replaced by solidarity, independence becomes interdependence. To reconcile the effects of administration, or bureaucracy, with professionalism three steps are essential: (i) experts in hospital management should carry out comparative studies in types of hospital administration; (ii) training schemes should place greater emphasis on administration; and (iii) experimental administration should be considered in the same light as experimental medicine. An amalgamation of the three steps should be used as a means of trying out structures that appear to be of use to both professionals and administrators.

ECONOMICS OF HOSPITAL MANAGEMENT

See also Abstract No. 33

35. HELLINGER, F. J. **Specification of a hospital production function.** *Applied Economics*, London, 1975, Sept., vol. 7, no. 3, pp. 149-160.

This paper extends a concept, which was developed for profit maximizing firms, to analyse the selection of a functional form for a hospital production function. A theory of hospital behaviour is presented and used to select the appropriate specification. The derived set of equations from a transcendental logarithmic production function are used to select the functional form.

36. NAESS, E. Rasjonalisering av helseinstitusjoner—effektivisering gjennom planlegging. **[Rationalization of health institutions—making them more efficient through planning.]** *Norsk Sykehustidende*, Oslo, 1975, Sept., vol. 48, no. 9, pp. 182-184.

Health plans adopted by the various counties of Norway involve an investment of n.kr. 6,000 million between 1974 and 1981 (1971 prices). Staffing the institutions

planned will absorb half the entire entry to the labour market, and the expense of running the health service will expand by 22 per cent a year. The only way to narrow the gap between medical possibilities and real service level is by rationalization. Since stop-watch rationalization rarely works in the hospital, efficiency can only be improved at the planning stage: when planning new constructions (or extensions), by increasing the efficiency of existing institutions, and calling on centrally available expertise in planning, purchasing and operating. Measures taken solely to reduce staff often lead to over-automation and over-investment; e.g. Huddinge Hospital, Sweden, has replaced 20 porters with a spacious automated box-transport system costing s.kr. 20 million. At least half the economies intended could have been attained by other methods such as improved organization and systematic routines and methods. The concept of rationalization must not be carried through at any price; limitation of the cost of investment must also be sought. The hospital giving best value for money is the one which is best planned and most efficiently organized, not necessarily the most expensive and highly automated one.

37. OSNES, M. Effektiviseringsarbeid i sykehus. **[Increasing efficiency in the hospital.]** *Norsk Sykehustidende*, Oslo, 1975, Sept., vol. 48, no. 9, pp. 180-181.

Correct use of hospital beds does not imply filling them but ensuring that they are used to maximum advantage by as many patients as possible. There are three 'bed factors': average occupancy; number of patients treated per bed per year; and average number of unoccupied beds per year. An increase in the average number of days spent in hospital per patient increases the apparent occupancy but can reduce bed availability to unacceptable levels. Effective rationalization of the stream of information reaching doctors and nurses involves limiting the information to the absolute necessary minimum. Staff are more highly educated and trained today than 20 years ago, and have a legal right to take part in all phases of the decision-making process. Centralization of services is expensive in capital and transport, and the immediate economies claimed (up to 20 per cent) often prove to be more limited in the long run. It is difficult to rationalize in the hospital sector by using the traditional methods, particularly regarding long-stay care. Nursing must evolve its own rationalization techniques. The paper is illustrated by a graph showing the immediate and long-term effects of a centralization scheme.

RUNNING COSTS

See Abstract No. 105

BED OCCUPANCY, ECONOMIC USE OF BEDS

See also Abstract No. 37

38. RUBIN, S. G. and DAVIES, G. H. **Bed blocking by elderly patients in general-hospital wards.** *Age and Ageing*, London, 1975, Aug., vol. 4, no. 3, pp. 142-147.

A point prevalence survey, using a questionnaire, was performed in three general hospitals to investigate the problem of elderly patients blocking acute hospital beds. A total of 1,010 occupied general beds were surveyed and all patients over the age of 60 years, who had been in hospital more than four weeks, and who, in the opinion

of medical and nursing staff, were no longer in need of the facilities of a general hospital, were investigated. Forty-eight patients (4.8 per cent of the total) were found to be genuinely in a bed inappropriate to their needs. Rehabilitation, together with assessment of these patients, appeared to be disorganized and lacked consistency, and decisions regarding suitable 'disposal' appeared to be made without sufficient consultation and conformed to no detectable pattern. The main reason for the continuing bed occupancy of the patients was the length of the waiting lists for alternative residential accommodation and the main single medical factor preventing discharge home or to a hostel was the problem of mobility. Of the 23 patients (48 per cent) who were only suitable for transfer to a long-stay hospital, 15 (31 per cent) could be placed in specialized accommodation if some degree of nursing care, at present not available, was provided.

APPOINTMENT SYSTEMS, WAITING LISTS

39. KNEIST, W. and others. Wartezeiten und Bestellsystem. **[Waiting times and appointment systems.]** *Zeitschrift für die gesamte Hygiene und ihre Grenzgebiete*, Berlin, 1975, Sept., vol. 21, no. 9, pp. 661-673; summaries in Russian and English, pp. 671-672.

The literature on the waiting time problem in the German Democratic Republic, Great Britain and Hungary is reviewed. The authors recommend different forms of appointment systems as one way of cutting the waiting times of both doctors and patients. For general practitioners and some specialists who are short of staff and equipment, a few simple organizational devices will prove helpful: a consulting hours diary, dovetailing of patients into the schedule according to social and medical needs and allocation of certain days and times for special groups of patients. In out-patient departments consisting of many specialty clinics, a more complicated system is necessary. It is advisable to establish a central department to handle and arrange all appointments, direct patients to the relevant clinic and keep the patients' records. [This abstract has been prepared from an English summary of the paper.]

DATA PROCESSING

See also Abstract Nos. 6, 46, 61, 66, 93, 101, 102, 104, 106, 107, 110, 111

40. ANJOU, L., CARLSSON, S. and HEURLIN, S. Förvaltningsutskottet, revisionen och ADB-frågorna: några synpunkter. **[The management committee, auditing and automatic data processing questions: some viewpoints.]** *Landstingens Tidskrift*, Stockholm, 1975, Oct., vol. 62, no. 11, pp. 14-18.

Computers are a valuable administrative aid because they handle and provide large quantities of information rapidly and accurately, laying a firm basis for analysis and planning. But they are expensive to run, information can in theory rapidly be withdrawn from them for unauthorized purposes, and they tend to dictate internal administrative routines. For these reasons, they should be under the control of management at county level at least. In order to improve control of the large quantity of data stored: operators must have limitations placed on their powers of action and be properly supervised; auditing must be planned to disclose mistakes; all fixed input data must be strictly checked; and rules must be evolved for control of (variable)

records data. The physical concentration of information in one place calls for strict fire and security precautions, the provision of secondary archives and back-up machinery with data reconstruction facilities, and structured division of responsibility and labour. Checks must be kept on access to input, output and programming facilities. Routines must be carefully defined to eliminate error and assist auditing and supervision. If computation work is to be contracted out to an outside firm, measures must be introduced to prevent loss of data and/or tapes in transit.

41. FERDERBER, D. J. **A standardized solution for hospital systems.** *Datamation*, Greenwich, Conn., 1975, Sept., vol. 21, no. 9, pp. 52-53.

In 1972 Deaconess Hospital, Evansville, Ind., a 597-bed general hospital, joined in a facilities management contract with National Data Communication Corp., a firm which had developed a turnkey hospital information system called VITAL. The system includes two central processor units (CPU), 14 disc drives, four tape drives, 83 cathode ray terminals, 48 receiver-only teleprinters, five hard copy terminals, one line printer and 10 serial printers. During regular operation, one CPU handles the on-line tasks while the second does batch processing. The system's operation was based on the patient ordering process for drugs but it can also be used for ordering laboratory tests, respiratory therapy, surgery, physiotherapy and sterile supplies. The admitting procedure is done on a preformatted screen, hard copy being furnished for the nursing unit, X-ray, patients' representatives, etc. The system automatically computes what insurance benefits are available to a patient. It incorporates a complete list of doctors, their specialties and biographical information and there are subsystems for the blood bank, budgeting, etc. Certain personnel functions, such as staff reports, pay roll and clocking in and out are also included. Though there were some difficulties with VITAL initially its benefits are far-reaching. They include: reductions in staff, clerical work done by professional staff, printed forms and lost charges; improved accountability, accuracy of information, cost accounting and cost containment; instantaneous input and retrieval of clinical information from numerous sites; centralized patient care data; and possible reduction in length of stay.

42. REECE, P. **A small but versatile hospital information system.** *Methods of Information in Medicine*, Stuttgart, 1975, Oct., vol. 14, no. 4, pp. 189-193.

The McMaster Medical Information System (MMIS) is built around three levels or divisions: modules, which initialize the system to various data types; modes, which manipulate data bases for the user; and segments, which divide the software up into blocks of core of equal length. Each utility in the system is accessible through five modes: a scan mode, through which a user may view data subsets; a select mode, in which logical 'anding' is performed between data subsets; a system mode, in which user transparent operations are performed; a statistics mode, for analysis; and a data entry mode. With these divisions as building blocks, an inexpensive and flexible information system has been developed; it is operable on a variety of host computer and data bases.

43. CARREN, D. M. **Multiple minis for information management.** *Datamation*, Greenwich, Conn., 1975, Sept., vol. 21, no. 9, pp. 54-56, 58.

A data processing system called CHAMPS is in use at the newly opened Canyon

General Hospital, Anaheim, Calif. It performs the usual data processing functions, but the approach is unusual in that it has been implemented on a cluster of mini-computers at a fraction of the cost of a large installation. When a patient is admitted the admitting clerk fills in a screenful of information on a formatted display. If patients are expected, existing skeleton records are brought up-to-date from data supplied by the doctor. The screenful of information is transmitted to central files and stored in a patient's 'chart' record. Meanwhile printing terminals produce labels, armbands, a hard copy patient's chart, etc. Copies of the admitting information go to the ward floor and appropriate ancillary departments. The computers are in one room in a central position in the hospital and input/output devices are distributed throughout the building. The terminals have special function keys so that one key can initiate an entire job or function. For security reasons authorized users have badges which must be inserted in the terminal to produce results. The patient's record can be added to by means of the hospital's telephone system, in-house dictation units or outside telephones. The on-line system is not difficult to learn and staff become familiar with it in two to six weeks according to the use made of it. Several financial programmes are nearly ready for incorporation in the system and it is hoped later to incorporate inventory control and staffing programs.

LIBRARIES

44. CARMEL, M. J. **What standards for standards? Some criteria for assessing standards for library services, especially in the health sciences.** *Library Association Record*, London, 1975, Oct., vol. 77, no. 10, pp. 238-240.

Standards for libraries in the National Health Service have been issued by various bodies, but they are permissive, vague, inconsistent and poorly researched. This paper discusses the standards which are needed so that librarians can work towards them with confidence. Eight criteria for such standards are set down. The new edition of the Library Association's standards should be radically different in form and content and should be prepared jointly with other interested organizations.

MEDICAL RECORDS

See also Abstract Nos. 42, 126, 128

45. ZUCKERMAN, A. E. and others. **Validating the content of pediatric outpatient medical records by means of tape-recording doctor-patient encounters.** *Pediatrics*, Evanston, Ill., 1975, Sept., vol. 56, no. 3, pp. 407-411.

An appraisal of the extent to which medical records are an accurate recording of the meetings between doctor and patient was carried out in 1973 in a university medical centre. Tape recordings were made at the time of the meetings and later compared with the written notes to discover the depth of information on the written records. Although diagnoses, appointments, studies and drugs were well recorded, dosages and features of the care required were not. Medical records are of great importance for four reasons: (i) the influence on doctor-patient relations and the structure of the care given; (ii) survey of the quality of care; (iii) importance of reliable

information for research, especially in primary care; and (iv) use as a defence in any accusation of malpractice. The survey indicated a relationship between the quality of the medical records and the effectiveness of the care. The patient had a greater understanding of the treatment and advice given him when all the information was presented in a written form.

46. CHISTONI, G.-C., HERMANN, P. and SCHNEIDER, P.-B. A propos de la codification des dossiers de malades en psychiatrie: essai de codification des dossiers de malades à l'aide de la méthode des mots-clés. **[On the codification of psychiatric records: an attempt to codify medical records by a key word system.]** *Social Psychiatry*, Berlin, 1975, Oct. 1, vol. 10, no. 4, pp. 173-188; summary in English p. 173.

The authors investigated the possibility of using a key word system for the classification and ultimately the computerization of psychiatric records. The difficulties encountered are discussed at length; these include the subjective nature of the doctor-patient relationship, the subjective nature of the doctor's observations and of his interpretation of the patient's symptoms, the problem of quantifying certain phenomena, and the danger of imposing an arbitrary structure on the clinical findings. The authors then describe methods of classifying their data, the use of diagnostic grids, and the definitions of the terms and headings which would be used in the records. Finally they outline the method which they have devised. Although they found that this method was satisfactory for the analysis of bibliographies, they could not establish a relatively simple and economical model for collecting the data contained in a medical record and computerization was not attempted. Models of 12 record cards are appended.

HOSPITAL STATISTICS

47. TEW, M. **What do hospitals do? The provision and utilisation of services in National Health Service hospitals in England and Wales 1949-1973: an analysis of Form SH3 returns.** (Health Services Research Group Report No. 9), Nottingham, Mrs. M. Tew, Department of Community Health, University of Nottingham, 1975, [122]pp.

Since the inception of the National Health Service in 1948, hospitals have returned to the Department of Health and Social Security (DHSS), or its predecessor, regular statements on Form SH3 of the services they have provided in the in-patient and out-patients departments of each specialty and of the use made of these services. Annual national summaries have been published by DHSS, together with, in recent years, a limited number of retrospective statistics. In this study information from these summaries has been brought together and analysed relatively to the population at risk.

OTHER SPECIAL ASPECTS

48. MILLARD, G. **Commissioning hospital buildings.** London, King Edward's Hospital Fund for London, 1975, 143pp. £4.50.

This publication is more than a new edition of the first King's Fund report on the subject *Commissioning new hospital buildings* [see *Hospital Abstracts*, Vol. 7, Abstract

83]. It is based on the work of a multidisciplinary working party, which has regarded the process of commissioning as a preparation for the move into the building, the move itself and the settling-in period after the move. The publication is in three parts: (i) the earliest beginnings; (ii) the building and preparation period; and (iii) the climax—handover, opening and completion. Appendices include a commissioning check list, outline commissioning programme, work schedule of commissioning team, schedule of unexpected problems, notes on reading architects' and engineers' drawings, example of a schedule of defects, glossary and a list of 65 references to the literature.

49. PERSSON, E. Inflyttningsplanering av ett modernt sjukhus. **[Planning movement to a new hospital.]** *Landstingens Tidskrift*, Stockholm, 1975, Oct., vol. 62, no. 11, pp. 25-30.

Moving to a new hospital involves more than merely transporting a fixed number of bodies and pieces of furniture from A to B. Factors affecting the move comprise medical needs, expense, scope of activity, co-ordination, staff resources, running-in, training, design of the new buildings, and whether equipment is to be scrapped or transferred. Decisions have to be made on: whether the move is to be made a department at a time or by type of patient; whether the level of activity should be cut back or maintained unaltered during the move; at what level new facilities (such as central sterilization) should be run until the move is complete; and whether the move is to take place over a long period or a short one. When the actual timetable has been settled, decisions must be taken about the future use or demolition of the old buildings, car parking facilities, and disposal of long-stay patients. Plans must cover: staff numbers, recruiting, placing and training; equipment; and administration for the new facility. The moving-in plan comprises: departmental accommodation (routing and timetable); equipment inventories and checks; supervision of rooms; staff plan; staff training. Great efforts must be made to ensure that attitudes to the move to modern buildings are positive from the top down as early as possible. The paper is illustrated with eight flow charts and diagrams illustrating factors affecting movement plans.

FINANCE AND ACCOUNTING

FINANCE

See also Abstract No. 57

50. JONES, D. R. and BOURNE, A. **The distribution of resources in the National Health Service.** *Hospital and Health Services Review*, London, 1975, Nov., vol. 71, no. 11, pp. 382-384.

A Department of Health and Social Security working party on the allocation of resources in the National Health Service (NHS) was set up recently. Its aim is to evolve a method of distributing revenue and capital finances equitably and removing the inequalities inherited by the NHS at its inception in 1948. The authors of this paper put the case for a distribution correlating provision with consumer need rather

than based on a uniform per head allocation of resources, and discuss methods of obtaining the necessary data for determining the correlations.

51. HOLAHAN, J. **Financing health care for the poor: the Medicaid experience.** Lexington, Mass., D.C. Heath, 1975, xii, 153pp. £6.00.

Medicaid was established as part of the United States federal/state public assistance system to provide health care for the medically indigent. This volume attempts to identify lessons learned from the programme that would be useful in the design of its successor by: (i) examining equity and efficiency issues in the structure of the programme and analysing the growth in costs from 1967 to 1972; (ii) investigating empirically the effects of alternative reimbursement arrangements and the geographic distribution of hospital beds and physicians, as well as factors such as income, education and race, on the use of services within the programme; (iii) analysing the impact which four suggested national health insurance programmes would have on the financing of services for the poor; and (iv) considering alternative approaches to increasing the efficiency of the delivery system so that reform can be implemented without serious adverse effects on prices of various services.

52. PRUSSIN, J. A. and WOOD, J. C. **Private third party reimbursement.** *Topics in Health Care Financing*, Rockville, Md., 1975, vol. 2, no. 1, pp. 1-100.

This paper considers the many aspects of private third party reimbursement, or private insurance schemes, in the United States. Six topics are covered: (i) development of health insurance, dealing with the history and growth of commercial health insurance, and the establishment of health maintenance organizations (HMOs); (ii) reimbursement for hospital services, the methods and discounts obtained; (iii) reimbursement for physician's services, the methods of coverage and definition of the services; (iv) cost containment mechanisms, the regulation and control of use; (v) working with the insurer, with definitions of insurance language, and rights; and (vi) the future of private third party reimbursement systems. There is also a copy of the American Medical Association's uniform health insurance claim form and an analysis of the conditions, together with a glossary of health insurance terms.

53. LEWIS, H. L. **A Blue Cross model: how one plan makes 'em love cost cutting.** *Modern Healthcare*, Chicago, 1975, Oct., vol. 4, no. 4, pp. 37-41.

Western Pennsylvania Blue Cross (WPBC) was established in 1937 as the state's first non-profit, community service health care organization. It now has 2.4 million subscribers and had, in 1974, premiums totalling $255.6 million. In Western Pennsylvania there is a population of 4.5 million, with 97 short-stay general hospitals in a 29 county service area. The WPBC has been seen as a cost-cutter for some time using various methods including: (i) prospective reimbursement; (ii) predictive reimbursement; and (iii) participating hospitals have to comply with health planning directives before adding extra beds and services. The WPBC faces two problems: (i) the lack of a comprehensive system of facilities and the retroactive denial of care; and (ii) strong competition from insurance companies. However, with 75 to 80 per cent of the Western Pennsylvania market the future for WPBC looks bright.

HOSPITAL ACCOUNTING

See also Abstract No. 60

54. CHILARD, C. A propos du plan comptable hospitalier: variations sur la comptabilité analytique d'exploitation. **[On the hospital accounting plan: variations on analytical accounting for operation.]** *Gestions Hospitalières*, Mantes, 1975, Aug./Sept., no. 148, pp. 613-622.

The author analysed the distribution of operating costs for laundry, laboratories, radiology, operating suites, kitchens, heating, workshops, garages, general administration, and for the medical, surgical, and maternity units in eight different hospitals. Costs were allocated between staff, materials, heating, lighting, depreciation, etc. He found considerable discrepancies in the make-up of costs between hospitals and it was obvious that very different criteria were used for allocating costs, e.g. one hospital did not charge heating and lighting against workshops and administrative offices. Methods of allocating costs of various outputs to different departments must be harmonized on a national basis before any meaningful comparisons can be made between the expenditure of different hospitals.

CATERING, DIETETICS, KITCHENS

HOSPITAL CATERING

55. GODFREY, R. C. **Not only for catering staff: a training in catering.** *Health and Social Service Journal*, London, 1975, Nov. 15, vol. 85, no. 4465, pp. 2556-2557.

The Scottish Hospital Catering School, established in 1965, has run a variety of courses aimed at improving the standards of catering and catering management in hospitals in Scotland. One of the catering school's more worthwhile projects is the training of audit and finance staff in the technical aspects of hospital catering management, with particular emphasis on costing and portion control. Progress has been made in hospital catering in Scotland through these courses, and many benefits have accrued.

56. BEAVAN, A. J. **The responsibility of the health service district catering manager.** *Health and Social Service Journal*, London, 1975, Nov. 15, vol. 85, no. 4465, p. 2560.

Under the reorganization of the National Health Service some catering posts have completely disappeared. Others have been extended to cover wider spheres, whilst many are new. A new appointment in catering management is the district catering manager, who is responsible for the efficient management of the catering services in the district. He implements policies for the catering service, collaborating and consulting with other managers. The function and responsibilities of the manager are outlined.

57. DAVIS, J. R. **The catering budget.** *Health and Social Service Journal*, London, 1975, Nov. 15, vol. 85, no. 4465, p. 2558.

The catering budget constitutes a prime tool for management in the planning,

co-ordination and control of a catering organization. It must be preceded by a critical analysis of the organization of the work and the responsibilities in the department. Potential trends must be established together with approximate costs of work. Cost reduction schemes should be established and control of the profit margin could be carried out. An overall view of the organization will indicate overlaps and gaps in responsibilities.

58. LYON, J. and PORRITT, B. **Diet and food service in an extended care facility.** *Hospital Administration in Canada*, Don Mills, Ont., 1975, Sept., vol. 17, no. 9, pp. 39-40, 43.

A 12-week study of the food service was conducted at the 64-bed extended care unit at Penticton (B.C.) Regional Hospital. Its aims were: (i) to estimate the actual food intake of patients; (ii) to assess the patient's reaction to the food service; and (iii) to observe the food habits of this category of hospital patient. This paper describes the method of study and sets out some of the findings. A number of observations are made regarding size of portions, the difficulty patients have eating meat and raw vegetables and fruit, the effect of the patient's emotional state and of social events on intake, differences between the appetites of men and women, and the importance of snacks. Six conclusions reached were: (i) meals are of good quality and variety and portions are adequate though sometimes too large; (ii) the Canadian recommended allowances are established with considerable safety factors built in; (iii) patient reaction to the food service is generally good; (iv) regular re-evaluation of diet orders by nursing staff is important; (v) patients like to have the same staff to serve them regularly; and (vi) social activities which include refreshments are good for patients' morale. Several important changes have been made as a result of the study. Eight of these are listed.

59. YOUNG, E. J. **Food for geriatrics—a special case in hospitals?** *Health and Social Service Journal*, London, 1975, Nov. 15, vol. 85, no. 4465, p. 2567.

In catering for geriatric patients special thought has to be given to their requirements and problems. Many have difficulty in eating, others cannot manipulate cutlery, and a large number find difficulty in eating meals in bed. A selective menu should be offered, and the dishes should be as attractively prepared as possible. There must be close co-operation between the catering and ward staff so that by working together the best service can be provided.

60. DRAKE, R. L. **Determination and allocation of food service costs.** *Hospitals*, Chicago, 1975, Sept. 16, vol. 49, no. 18, pp. 75-78.

Some misconceptions and poor practices in present-day allocation of catering costs are outlined. The costing method selected should show a fair balance between cost of implementation and degree of accuracy. The easy-to-use method described in this paper has been developed by members of the research and development committee of the American Society for Food Service Administrators and has been approved by the Society's board of directors as a workable method of identifying and separating patient and non-patient catering costs. The simplest form of cost allocation is illustrated in tabular form.

61. **Computer in the kitchen.** *Health and Social Service Journal*, London, 1975, Nov. 15, vol. 85, no. 4465, p. 2562.

The catering department of Dudley Road Hospital, Birmingham, has produced a computerized menu recipe system which has increased efficiency and saves time. The system is being studied by the Department of Health and Social Security for possible national use. The catering scheme caters for more than 2,600 patients, and is in two parts: daily kitchen ingredients control information maintaining control at source; and weekly cost figures per patient. A weekly discrepancy list shows any under-use or over-use of food, ensuring that the patient's diet does not become unbalanced. The system has yet to be evaluated but as a working system it offers many advantages and is a more efficient housekeeping scheme.

62. DORNEY, D. **Equipment aspects of cook-freeze.** *Health and Social Service Journal*, London, 1975, Nov. 15, vol. 85, no. 4465, p. 2565.

The full implications of the cook-freeze catering system need to be understood in order to discuss equipment. Some activities in the catering operation will remain almost unchanged, others will alter dramatically. Several new methods will also have to be introduced. Guidelines for cook-freeze production are: (i) the rate of production of food should be as constant as possible hour by hour and day by day; (ii) the most rapidly prepared products should be scheduled for the beginning of the production day; (iii) overlapping work times will enable staff involved in cooking and freezing operations to be effectively employed; and (iv) large quantities of food should be produced in a sequence of small batches rather than in one large batch. The merits of re-usable containers and disposable containers, blast-freezers and cryogenic freezers, fitted racks, mobile racks and live storage are assessed.

63. TAYLOR, D. G. **Cook-freeze design principles.** *Health and Social Service Journal*, London, 1975, Nov. 15, vol. 85, no. 4465, p. 2566.

Various schemes have been produced to show equipment layouts for freezing and storing in hospitals, educational and industrial areas. The work carried out by the Electricity Council Research Centre has produced an approach to a freeze production catering unit design based on simple batch equipment layout capable of producing the main components of the menu demand.

DIETETICS IN THE HOSPITAL

64. HOLLI, B. B. and OAKES, J. B. **Feeding the burned child.** *Journal of the American Dietetic Association*, Chicago, 1975, Sept., vol. 67, no. 3, pp. 240-242.

The Shriners Burns Institute, Cincinnati, accepts children from birth to 16 years. The 30-bed unit provides equally for acutely ill patients and those requiring reconstructive surgery. Length of stay averages 55 days for the former, 28 days for the latter. Increased calorie intake is necessary in burn patients and age, sex, severity of injury and previous nutritional status should be considered in determining calorie needs. Protein intake is of paramount importance and this may be increased 50 per cent or more over normal requirements. Great ingenuity is necessary to find foods which appeal to the children whose preferences are often stronger than those of adults. They

need to be told why food is important to them and should be offered a good choice at all meals. Trays are assembled in the kitchen adjacent to the wards so second helpings can easily be supplied when needed. Children who are well enough eat together at small tables. A special occasion is made of any holiday and birthdays are recognized by a birthday cake and a present. The dietitian or her assistant helps those children old enough to select their own meals and also makes sure that the mothers make a suitable choice. When nutritional intake from meals is insufficient the child may have high protein, high calorie milk shakes or other dietary supplement orally or by nasogastric tube. The dietitian interviews the child's mother at the start of patient care to collect and record information about usual eating patterns, etc. Multidisciplinary conferences are held twice a week to discuss all aspects of patient care.

65. HEGEDUS, S. and PELHAM, M. **Dietetics in a cancer hospital.** *Journal of the American Dietetic Association*, Chicago, 1975, Sept., vol. 67, no. 3, pp. 235-240.

Cancer patients present the dietitian with many problems—they may have very poor appetites, nausea, vomiting or mouth ulcerations from various treatments. This paper describes some procedures at the M.D. Anderson Hospital and Tumor Institute. It deals with the problems of patients on radiation treatment, those needing tube feeding, those with dental problems resulting from radiation of the head and neck area and those undergoing surgery or chemotherapy. When a patient is unable to eat because of nausea and vomiting and tube feeding is poorly tolerated, total parenteral nutrition (hyperalimentation) is sometimes recommended by the doctor. Food sterilization procedures are necessary for some patients with leukaemia and lymphoma-sarcoma. In the paediatric unit parents can live in with the child and can assist with the choice of food. Every effort is made to appeal to the child by providing a special paediatric menu. Plans for the new paediatric unit include a dining-room where children who are well enough will be able to eat together. An 110-bed Annexe and Rehabilitation Center provides facilities for ambulant patients. Here they can select their food in a cafeteria. A dietitian or her assistant is always on duty to encourage them to eat well-balanced and nourishing meals within the limitations of their diet. Each floor at the Center has a stocked pantry where patients can help themselves to light snacks and beverages.

66. LEE, C. A. **Computers for dietitians.** *Health and Social Service Journal*, London, 1975, Nov. 15, no. 85, no. 4465, p. 2563.

Computers have become increasingly important in helping to decrease the mathematical load for dietitians, leaving more time for specialized aspects of their work. A number of nutritional analyses have been developed at various centres; the one most frequently used is that produced at Northwick Park Hospital. The computer can provide a printout that breaks down all the foods into constituent parts, providing daily or weekly totals. Dietitians can also use visual display units to order diets from the dietetic department.

KITCHENS

See Abstract No. 62

CANTEENS, STAFF DINING-ROOMS

See Abstract No. 14

LAUNDRIES AND LINEN SERVICE

LAUNDRIES

67. DONCIEUX, J. L'unité de mesure dans une buanderie. **[The unit of measurement in a laundry.]** *Techniques Hospitalières*, Paris, 1975, June/July, vol. 31, nos. 357/358, pp. 70-76.

Centralization of laundries because of increasing costs does not present constructional problems, but there are management difficulties. This paper analyses the functioning, unit of measurement of work and staff complement in a central laundry in Quebec, which services 17 hospitals, the farthest being 70 kms. away. The activities of the laundry are divided into 16 'centres' and each of these is described together with details of its staff and output per man/hour. Analysis of all of these and the links between them makes it possible to determine the exact loadings for each centre and to seek maximum output by comparing them with standard units of measurement or possible savings with increased mechanization.

68. BROWN, W. **Fast line unit concept for personal wear gains new support.** *Power Laundry and Cleaning News*, London, 1975, Oct. 31, pp. 12-13.

A Fast Line unit for the processing of patients' personal work is in operation in the laundry at the Stanley Royds Hospital, Wakefield. The laundry was opened in 1973, and a 24-hour daily service is given. The Fast Line unit is equipped with four 40-pound Schulthess washers, a 20-pound Speed Queen washer, three 40-pound Speed Queen tumblers and two Weston Maxiform finishers. The laundry caters for 10 hospitals, totalling 3,032 beds, and needing 110,000 to 120,000 pieces of linen to be processed each week. There are 87 workers including three van drivers, three master tailors and a sewing room staff of 20. There are five units to the laundry: foul wash, main laundry, staff service, Fast Line and dry cleaning; the Fast Line constitutes an independent unit and is operated as such. The laundry, as a whole, produces work of a very high quality, in a very efficient manner.

HYGIENE IN THE HOSPITAL

See Abstract No. 78

HOSPITAL INFECTIONS

69. BERBEE, G. A. M., FURTH, R. van. and NOBLE, W. C. **Endemic infection in surgical wards.** *Journal of Hygiene*, London, 1975, Oct., vol. 75, no. 2, pp. 185-194.

An investigation amongst male patients in a surgical ward of the University Hospital at Leiden, Netherlands, was carried out to assess the prevalence of wound infection, with reference to 'clean' and 'dirty' wounds, the time of occurrence after surgical intervention, and the bacteria causing wound infection in a non-epidemic situation.

In three periods of investigation all information regarding the patient, age, site and type of operation, duration of operation, length of incision and the clinical appearance of the wound was analyzed. The results showed some infection due to Gram-negative bacilli, though *Staphylococcus aureus* remained the single most important pathogen even in the absence of epidemic spread. Beta haemolytic streptococci were isolated in large numbers from four patients with deep wound infection. Changes introduced in the pattern of post-operative care reduced sepsis due to *St. aureus*, reduced the severity of the wound infection and apparently decreased the need for antibiotic therapy. The patients who became infected were retained in hospital longer than those who escaped clinically apparent infection. Post-operative surgical ward infection is still too frequent, and infection can be reduced by reintroducing hygienic nursing procedures devised by other workers during the peak of studies of hospital infection.

70. AL-DUJAILI, A. H. and HARRIS, D. M. *Pseudomonas aeruginosa* **infection in hospital: a comparison between 'infective' and 'environmental' strains.** *Journal of Hygiene*, London, 1975, Oct., vol. 75, no. 2, pp. 195-201.

Hospital infections associated with *Pseudomonas aeruginosa* appear to be infrequent, except in specialized situations. Over a period of 14 months, 156 infections or episodes of infection in six hospitals in Sheffield were investigated. Pyocine typing and serotyping suggested that 145 distinct episodes had occurred caused by 78 different strains. During the investigation 15 distinct strains were isolated from the environment at one of the hospitals; 12 were apparently un-associated with infection in the same ward during the period, and four were types not encountered in infective processes at any hospital. Controversy still exists over the importance of contamination of the hospital environment; the sporadic nature of hospital infection with *Ps. aeruginosa* may be partially explained by failure to produce haemolysin *in vitro* correlated with lack of virulence *in vivo*, despite the prevalence of strains of this species in the environment.

71. DODT, B. and JENSEN, I. F. Hepatitis i Dialyse Centret i Århus: streng profylakse kan hindre nye hepatitis-tilfaelde. **[Hepatitis in the Dialysis Unit in Århus: strict prophylactic measures can prevent new hepatitis outbreaks.]** *Sygeplejersken*, København, 1975, Oct. 1, no. 39, pp. 4-7.

All patients in the haemodialysis unit, Århus Hospitals, are treated as potential sources of virus hepatitis infection; strict infection prevention measures are adopted as a routine, and are strengthened when treating patients with manifest hepatitis or positive Australia antigen reaction. The unit consists of three dialysis rooms (one four-bed, one two-bed and one single isolation room), a large entrance corridor, a sluice and a staff room. Where possible, patients are taught to check themselves during dialysis. Overalls, gloves, etc., coming into contact with blood, faeces or urine are thrown away. Since 1970 the unit has used disposable Rhone-Poulenc kidneys and dialysis concentrate containers. All collecting vessels are marked 'DANGER—INFECTIOUS' with a yellow label. Used disposable equipment is placed in a plastic bottle half-filled with four per cent Diversol BX (active principle: chlorinated trisodium phosphate + potassium bromide) and sent for destruction. The same solution is used for washing equipment and floors. Mattresses and bedding are disinfected with formalin once a week. Patients and staff eat from disposable ware, and staff are tested for Au antigen and transaminases once a month. The single room is used exclusively

for patients with hepatitis, with an even more stringent routine. No cases of staff hepatitis have occurred since 1971.

72. MORO, S., NERI, V. and CARAMELLO, S. Indagini sulle fonti di contagio in una sezione neonatale con particolare riguardo alla contaminazione intra-partum da *E. coli* ed al ruolo del personale di assistenza. **[Inquiry into the sources of contamination in a neonatal unit, with particular reference to intra-partum contamination with *E. coli* and the role of nursing staff.]** *Ospedale*, Torino, 1975, Oct., vol. 28, no. 10, pp. 247-252.

After four sporadic but fatal cases of *Escherichia coli* gastro-enteritis had occurred in premature infants at the Mauriziano Hospital, Turin, in 1971 and 1972, bacterial isolates from the hands and throats of the 10 nurses in the neonatal unit were studied on three separate occasions. During the same period, vaginal swabs from 28 mothers at the time of delivery and rectal and throat swabs from 46 full-term infants and 18 premature infants were also investigated. The results are tabulated. *Staphylococcus aureus* was identified 50 times, streptococci 55 times, and *E. coli* 73 times. *Pseudomonas aeruginosa* was never found. The four strains of *E. coli* isolated from the nurses' hands could not be typed with serum corresponding to the commonest serotypic enteropathogens. In the premature infants none of the 11 strains of *E. coli* could be serotyped, and in the full-term infants 17 of the strains identified were serotyped as being of qualified pathogenicity. None of the strains was identical to those which had caused the earlier cases of gastro-enteritis and during the period of the investigation no cases of gastro-enteritis occurred in the unit.

SOURCES OF INFECTION

See Abstract No. 72

PREVENTION AND CONTROL

See also Abstract No. 71

73. DORAN, B. **An infection control controversy.** *Modern Healthcare*, Chicago, 1975, Sept., vol. 4, no. 3, pp. 46-48.

A lot more infection and a lot less control are in store for hospitals which ignore routine environmental microbiological sampling. This is the warning from microbiologists and epidemiologists who are fighting hospitals' acceptance of the American Hospital Association and the Center for Disease Control's opinion that routine sampling is not a necessary practice for controlling hospital-acquired infection. This paper presents some expert opinions on the controversy.

74. HAXHE, J.-J. and others. Unité de soins aseptique: une nécessité dans la structure hospitalière moderne. **[Aseptic care unit: a necessity in the modern hospital.]** *Techniques Hospitalières*, Paris, 1975, June/July, vol. 31, nos. 357/358, pp. 59-64.

The use of sterile rooms is not essential for immunosuppressive therapy; an aseptic

ward can be set up even in an old hospital. An aseptic care unit should be provided in a new hospital. In a 10-year old hospital, a six-bed ward was adapted and equipped according to aseptic requirements and staffed with a multidisciplinary team. The nursing staff consists of eight qualified nurses and six nursing assistants who had special training. Staff and visitors wear protective clothing and observe strict rules of hygiene, all medical supplies and equipment are decontaminated, linen and clothing are either disposable or changed every day, rooms are disinfected and washed. Food is treated with infra-red rays and certain dishes which cannot be made sterile are excluded from the menu, patients are washed and disinfected twice daily, diagnostic equipment is either decontaminated or kept in the unit and patients are prepared in advance for isolation. Bacteriological control in the unit has resulted in a very low and stabilized rate of bacteria in the environment and in general and low incidence of bacteria in patients. Preliminary comparison of infections acquired by groups of patients treated in and outside the aseptic unit confirms that more 'aggressive' therapy with less risk can be used in this environment. A plan of the unit is included.

HYGIENE IN THE OPERATING THEATRE

75. BURDIN, Ph. and CASTAING, J. Notre expérience de la chirurgie sous 'bulle'. **[Experience with surgery under a 'bubble'.]** *Techniques Hospitalières*, Paris, 1975, Aug./Sept., vol. 31, nos. 359/360, pp. 61-63.

A preliminary report is given on the authors' experience in carrying out orthopaedic surgery inside a 'bubble' (the Isop-Celster). The 'bubble', an envelope of pliable plastic filled with filtered sterile air, includes an inlet for the sterile transfer of instrument containers, transparent windows for the operating team to see through, and surgical gloves. The 'floor' of the 'bubble' is glued to the patient's skin with Steridrap 3M. The interior is sterilized between procedures with paracetic acid, using a Sterivap apparatus. A total of 18 orthopaedic operations has so far been carried out inside the 'bubble' and no insuperable difficulties have been encountered. Bacteriologically, the 'bubble' is an outstanding success. Four photographs and three diagrams are included.

76. NIELSEN, M. L. and others. **Anaerobic and aerobic skin bacteria before and after skin-disinfection with chlorhexidine: an experimental study in volunteers.** *Journal of Clinical Pathology*, London, 1975, Oct., vol. 28, no. 10, pp. 793-797.

The amount, composition and localization of anaerobic and aerobic bacteria in normal skin before and after disinfection were studied. Fourteen volunteers without any disease of the skin and 14 surgical patients were studied. The superficial bacterial flora were sampled by velvet pad imprints, and the deep flora were determined from whole skin biopsies. Only one anaerobic species *Propionebacterium acnes* was encountered, *Staphylococcus albus* dominated among the aerobic superficial bacteria, while diphtheroids, *Micrococcus* spp., and lactobacilli occured sporadically. The deep aerobic bacteria were present in a significantly greater amount than the anaerobic. A two-step cleansing/disinfection process was evaluated *in vivo* and aqueous cetrimide/chlorhexidine (Savlon) followed by chlorhexidine in alcohol (Hibitane) almost eradicated both the superficial and deep anaerobic and aerobic skin flora.

STERILIZATION

77. MOSTAFA, A. B. M. G. and CHACKETT, K. F. **Radioactive tracers in the assessment of cleaning of surgical appliances.** *International Journal of Applied Radiation and Isotopes*, London, 1975, Nov., vol. 26, no. 11, pp. 651-655.

During any surgical operation a large number of stainless steel instruments are soiled with a variety of biological materials. Central sterile supply departments in hospitals have washing facilities but the only criteria for checking the efficiency of the washing process is visual examination which is highly subjective. The possibility of using radioactive tracers to assess the effectiveness of the washing system are considered. Five labelled compounds were used as soiling material and tested. Of the five only HSA-Tc and RBC-Cr were found suitable for assessment, the other compounds HSA-I, RBC-Pb and *Escherichia coli* with selenomethionine undergo some degree of decomposition under ultrasonic irradiation or heat treatment. In conclusion, stainless steel surfaces can be satisfactorily cleaned by modern machines if they are adequately maintained and serviced, although crevices and serrated edges may still present large areas of biological soil.

SAFETY MEASURES

78. FRASER, Sir I. **Safety in hospital.** *Hospital and Health Services Review*, London, 1975, Oct., vol. 71, no. 10, pp. 341-346.

The author begins by listing 14 essentials for the safety of the elderly and infirm whether they be in hospital or elsewhere. A survey has shown that in hospitals the causes of accidents fall into four main groups: (i) 66 per cent caused entirely by the patient; (ii) in 16 per cent medical staff to blame; (iii) in 14 per cent patients and staff equally to blame; and (iv) 4 per cent caused by a physical, mechanical or electrical fault. In most cases when the patient is to blame falls or slipping are involved. Where the fault is with the staff it usually relates to wrong treatment or errors of some kind in treatment. Dangers vary according to the type of hospital, for example, the mental patient is unreliable, the geriatric patient infirm. The nurse:patient ratio is a very important factor. Electrical hazards have increased with the many electric devices now in use and hospital infection still presents problems in wards and operating theatres. There is always the danger of an explosion in the operating theatre though this has perhaps been exaggerated. Hospitals are fully alert to the possibilities of accidents but human error can never be entirely eliminated.

ELECTRICAL ACCIDENTS

79. ROTH, H. H., TELTSCHER, E. S. and KANE, I. M. **Electrical safety in health care facilities.** New York & London, Academic Press, 1975, x, 218pp. £9.35.

This book grew out of the need to explain in a systematic fashion why certain situations in hospitals are hazardous, how hazards can be minimized, and how to evaluate the many safety devices which have become available. There are chapters on: basic electricity and hospital applications; the electrical environment of the patient; the characteristics of installations; patient-protection systems; safety testing; and establish-

ment of a practical safety, preventive maintenance and repair programme. Many diagrams are included and each chapter has a bibliography.

FIRES AND FIRE PREVENTION

80. MERKUS, Th. Brandbeveiliging in ziekenhuizen en instellingen: optimale brandbeveiliging is ondanks hoge investering een zaak van levensbelang. **[Fire prevention in hospitals and institutions: optimum fire protection is a vital matter in spite of its high cost.]** *Technische Gids voor Ziekenhuis en Instelling*, Amsterdam, 1975, Sept. 30, vol. 44, no. 1085, pp. 725, 727, 729, 731, 733-734.

The author favours high investment in fire protection and discusses five aspects in detail: prevention, alarm systems, fire fighting methods, fire escape routes and evacuation. Prevention deals with: the design, structure and lay-out of the building, including prevention of spread (illustrated) and type of building materials; technical precautions such as automatically closing doors, automatic fire extinguishers, and siting and protection of electric wiring; and the organization of staff and fire drills. General alarm systems and automatic systems individually sensitive to fumes, smoke, heat and fire are discussed in detail and illustrated with drawings. Fire fighting apparatus such as hand-operated extinguishers, wall hydrants and automatic extinguishers are dealt with, including fire extinguishing agents; a table is given of their effect on various materials. Under fire escape routes, suggestions are made for emergency lighting and energy systems as well as a special ventilating system and automatic stopping of lifts and escalators. Evacuation is based on good organization and for low-built buildings shutes are suggested. Inspections should be carried out regularly. A table giving causes and incidences of fire over three consecutive years (1972 to 1974) is included.

PLANNING FOR MASS EMERGENCIES

See Abstract No. 92

THE PATIENT

ADMISSION AND RECEPTION

See also Abstract Nos. 121, 127

81. OKELBERRY, C. R. **Preadmission testing shortens preoperative length of stay.** *Hospitals*, Chicago, 1975, Sept. 16, vol. 49, no. 18, pp. 71-74.

At Latter-Day Saints Hospital, Salt Lake City, Utah, about half of the 25,000 yearly admissions receive multiphasic health testing; about 4,000 of these are tested prior to the day of admission. The testing procedure is described, together with the organization and staffing. Pre-admission testing has shortened pre-operative lengths of stay and has permitted treatment earlier in the patient's stay. Plans are under consideration for the continued refinement of the concept through public education, as well as for expansion of facilities to accommodate new technology and the anticipated demand by physicians and the public.

82. Een patiëntenboekje in de vorm van een waaier. **[A patient booklet in the form of a fan.]** *Ziekenhuis*, Utrecht, 1975, Aug. 6, vol. 5, no. 15, pp. 372-373.

This paper describes a booklet, which provides hospital patients with information easier to read and more comprehensive than the conventional information booklets. Shaped like a fan, no paging is necessary and the booklet, in colourprint, can be opened by a thumb movement. Information can be seen at a glance. Written texts are brief and illustrations used whenever possible. Pages deal individually with the following subjects: wards, nursing, doctors, general information, recreation, visiting, day routine, services, outside communications, discharge, catering, medicines, hospital layout, introduction. Information is fairly extensive, the page on doctors for instance also deals with psychological and social care. The leaves are held together with a clip and can be individually replaced when changes occur (e.g. a change in hospital doctors). Illustrations are given of the shape of the booklet and of the pages 'day routine' and 'medicines'.

WELFARE OF THE PATIENT

See also Abstract No. 129

83. WRIGLESWORTH, J. M. and WILLIAMS, J. T. **The construction of an objective test to measure patient satisfaction.** *International Journal of Nursing Studies*, Oxford, 1975, vol. 12, no. 3, pp. 123-132.

Patient satisfaction was analysed from a series of viewpoints: food; cleanliness; privacy; personal identity; relationships with staff; relationships with other patients; security and confidence; and freedom. Two broader categories were also analysed: the services received; and the personal feelings of the patient. A questionnaire was given to the occupants of two male surgical wards in Wythenshawe Hospital, Manchester. Six conclusions emerged: (i) satisfaction was not related to social class, number of times in hospital, or marital status; (ii) the patient's background appeared to be the most important determining factor; (iii) satisfaction depended upon confidence in the doctor; (iv) those not confident were more critical of other aspects of care; (v) many who were confident of their doctors believed they were well informed; and (vi) patients felt that they were better informed by nurses than by doctors. The production of a questionnaire that could be used in routine assessment of satisfaction is considered.

84. NAGARAJ, S. and others. **Health education status in teaching hospitals and associated health centres in India.** *International Journal of Health Education*, Geneva, 1975, vol. 18, no. 3, pp. 157-165.

A study to assess the state of health education and to explore the scope for integrating health education with the medical care services in India had five objectives: (i) an assessment of the extent of current health education activities; (ii) study of the pattern and content of communication between staff, patients and relatives; (iii) study of opportunities for health education in slack periods in hospitals; and (iv) to suggest a plan for providing health education in hospitals. Surveys were carried out in four hospitals using systematic sampling of beds, random sampling of out-patients registering and a sample of the hospital staff who came into contact with the sample patients. The findings of the surveys indicate that: (i) there is much scope for reorganizing health

education activities in hospitals and in the field; (ii) the desire for more information in disease-ridden areas indicates a need for health education which can be filled through group or mass media approaches; (iii) the health education system must be streamlined in view of the limited time available in hospitals and all categories of staff should be included; (iv) higher literacy levels give scope for using printed texts; and (v) the viability of groups for health education on family planning and general subjects with husbands and wives should be considered.

85. EGELAND, T. Pasientens rettsvern. **[Legal protection of the patient.]** *Norsk Sykehustidende*, Oslo, 1975, Sept., vol. 48, no. 9, pp. 169-173.

Certain decisions, because their implications impinge on the legal sphere of interest of the individual, must be based on law. This 'principle of legality' restrains the authorities' right of committal to an institution whilst assuring the individual's right of admission to treatment where necessary and feasible. Where there is a shortage of beds, the criteria on which priorities are based must be clearly defined. The prescription of treatment for conscientious objectors, such as Jehovah's Witnesses, also involves principles of official intrusion on the rights of the individual. The concept of 'open government and open administration' raises questions of the patient's right to read his own case notes and of the confidentiality of computer-stored data. The most important protection the patient has is the general principle that all therapeutic staff should accept the legal, philosophical and behavioural standards normal to the community. The issue of compensation is the responsibility of the Compensation Institute. The preventive and compensatory philosophies behind the Compensation Institute are supported by the security provided by the public and private insurance systems. Hospitals are liable for compensation in the event of culpable individual or team-work (anonymous) negligence. The doctor has a duty to keep up to date, to guard against overestimating his own abilities, and to warn patients of the potential dangers of any procedure. The question is raised whether cash compensation ought not to be replaced by other forms of assistance.

THE GENERAL PRACTITIONER AND HIS PATIENTS

See also Abstract No. 113

86. REEDY, B. L. E. C. **Usefulness of a gazetteer of general practice.** *British Medical Journal*, London, 1975, Nov. 15, vol. iv, p. 419.

A gazetteer of information about 55 general practices was sent to all the hospitals, area health authority, and social services staff in Aylesbury to encourage communication with the practices. It listed: (i) the hours general practitioners (GPs) were available for discussion; (ii) home telephone numbers of GPs; (iii) names of staff; (iv) times when surgery was open and staffed; (v) off-duty arrangements of GPs; (vi) availability of home nurse; and (vii) availability of treatment room nurse. An investigation was carried out six months after its issue to determine the usefulness of the gazetteer. Its use was found to be infrequent although those who used it were enthusiastic. In general the gazetteer was used more by people who were already in the habit of communicating with GPs, so it is arguable whether the gazetteer itself has had a great deal of effect on patterns of communication.

HOSPITAL CARE

See also Abstract Nos. 45, 128, 132, 135-137, 142, 147, 148

87. MARRINER, A. **The nursing process: a scientific approach to nursing care.** Saint Louis, Mosby, 1975, xiv, 241pp. £3.70.

In all nursing situations, the proper use of the 'nursing process' determines the degree of effectiveness and efficiency of nursing intervention. This book presents a compilation of various theoretical concepts concerning the four phases of the process: assessment, planning, implementation, and evaluation. Tools used in the implementation of each phase are discussed. Each chapter has an annotated bibliography and selected readings.

88. PEMBREY, S. **From work routines to patient assignment: an experiment in ward organisation.** *Nursing Times*, London, 1975, Nov. 6, vol. 71, no. 45, pp. 1768-1772.

An experiment in ward organization, based upon the needs of the patients rather than upon traditional work routines, was evolved. This scheme produced more integrated nursing and a staff more able to cope with situations. A 28-bed ward at St. Thomas' Hospital, London, serving 18 female surgical patients and 10 female orthopaedic patients was taken as a basis, and the patient's day was substituted as the framework for the nurses' day. Work was divided not into tasks but into patients, thus the junior nurse was matched with the least ill patient and the senior nurse was given a group of patients requiring skilled nursing. The sole requirement to make the scheme work was for a team of hard working staff who were prepared to give support to the newly-trained nurses, backed by support from the ancillary workers and medical staff.

89. HUGHES, A. O. and MILLER, D. S. **The determinants of demand for pre-convalescent beds.** *Hospital and Health Services Review*, London, 1975, Oct., vol. 71, no. 10, pp. 350-353.

Pre-convalescent units may be defined as hospitals with 90 per cent or more of their beds allocated to patients who have had the intensive part of their treatment but who still require active nursing and medical care. Length of stay varies from a maximum of four weeks for medical and surgical patients to up to three months for orthopaedic cases. Costs are about half those for acute care, and as acute beds are released waiting lists are lessened. An investigation was carried out in Nottingham because problems of bed availability in two pre-convalescent units (162 beds) were affecting patient flow from the district general hospital (545 beds). A one in two sample of acute admissions at four seasonally separate times of the year was studied, patients being monitored from admission to discharge. Tables in the text show the characteristics of 2,299 'acute admission' patients, of 280 admitted to pre-convalescent units and of 79 not transferred to such units. Patients using the pre-convalescent accommodation are usually elderly, without adequate home support, likely to be left with initial or permanent disability, or needing a 'staging post' before being transferred to geriatric care. Evidence in Nottingham suggested that the death rate in the units might be as high as one in 10. As a guide to the need for pre-convalescent units it is shown that one in three of acute admissions over 70, one in six in the 50-69 group and one in 16 under 50 may require care in them.

90. UNITED STATES. BUREAU OF HEALTH MANPOWER. DIVISION OF NURSING. **Assessment of nursing services: report of the conference June 1974.** (DHEW Publication No. (HRA) 75-40) Bethesda, Md., Health Resources Administration, 1975, vi, 141pp.

The conference reported in this publication was specifically focused on the problem of improving nursing care through the development of reliable and realistic methods of ensuring quality. Aspects covered by the papers included: the dilemma of assessing nursing services; conceptual issues in the appraisal of the quality of care; the implications of the Professional Standards Review Organization for nursing service; and monitoring the quality of nursing care.

HOME CARE, AFTER-CARE

See Abstract Nos. 138, 139

SPECIAL DEPARTMENTS

WARDS

See Abstract Nos. 88, 94

OPERATING SUITES

See also Abstract No. 75

91. RAIT, A. **A Kardex system.** *Nursing Times*, London, 1975, Oct. 16, vol. 71, no. 42, NATN suppl. p. iii.

When all the seven branch hospitals of the Royal Free Group in North London came under the nominal heading of the Royal Free Hospital, Hampstead, it was necessary to collect the information regarding all surgeons' requirements onto a central file. Xeroxed data sheets were distributed to all branches for the staff to record the surgeon's requirements. When these had been collected a Kardex system was designed which would give a complete record of requirements at a glance. An example is given of the data sheet used for each operation for each surgeon.

92. CRAIG, I. M. **The role of the theatre during major accidents.** *NATNews*, Matlock, 1975, Sept., vol. 12, no. 7, pp. 20-21.

Since 1972 Brook General Hospital, Woolwich, has been involved in two major accident situations, and a plan for the efficient mobilization of a theatre team with all the necessary equipment has been developed. Relevant staff are divided into two teams which are on call alternate weeks; they work alternating 12-hour shifts for the duration of an emergency. Action cards list each person's responsibility during major accidents. Details of the eight cards for the operating theatres are reproduced.

ANAESTHESIA

See Abstract No. 21

PHARMACY

93. WILLEMS, J. and others. **Computer applications in a hospital pharmacy.** *Methods of Information in Medicine*, Stuttgart, 1975, Oct., vol. 14, no. 4, pp. 194-198.

This paper describes briefly the basic aims and implementation of a pharmacy computer system in the 900-bed St. Raphael University Hospital, Louvain, Belgium. The system, which uses an IBM 370/135 computer with 256K of core capacity and 400 million bytes of disc storage, was designed in and around a conventional pharmacy structure. Development of a pharmacy data base, computerized floor stock control, management of the central pharmacy, and integration in the overall hospital information system are the main features of the new medication system at present. Continuing development of the system is aimed at more clinically oriented objectives.

94. CALDER, G. **Ward pharmacy systems.** *British Journal of Hospital Medicine*, 1975, Nov., vol. 14, no. 5, pp. 566-568, 571-574.

The problems created by the great variety of drugs available today have promoted a radical reappraisal of the pharmacist's role in the use of these drugs in the hospital. The necessary changes range from the basic reorganization of the safe and efficient distribution of drugs to the increased involvement of the pharmacist in clinical care. Various systems have evolved which place the pharmacist in a key role in the drug distribution system. The planning and organization of the pharmacy department has been modified with improvements in packaging and presentation of drugs; decentralization has become more widespread. This paper reviews the different pharmacy systems in operation, concluding that greater involvement of the pharmacist with the clinical team results in increased safety and efficiency.

95. BALLINGER, B. R., RAMSAY, A. C. and STEWART, M. J. **Methods of assessment of drug administration in a psychiatric hospital.** *British Journal of Psychiatry*, London, 1975, Nov., vol. 127, pp. 494-498.

A survey was carried out to investigate reports of discrepancies in drug administration in psychiatric hospitals. Two wards in a psychiatric hospital and one ward in a mental handicap hospital were studied. Urine samples were tested for psychotropic drugs and ward drug rounds were observed to detect discrepancies in administration. Of the 266 instances of drug administration tested for in urine specimens, prescribed drugs were not detected in 7.9 per cent of cases, and non-prescribed drugs were found in another 29 instances. Observation was made of 3,689 instances of drug administration, and in 1.7 per cent of these the drug was not given or taken as prescribed, whereas no ingestion of non-prescribed drugs was observed. The reasons for the discrepancies and the different results obtained by the two methods are discussed.

96. DUGAS, J. E., CARDONI, A. A. and PIERPAOLI, P. G. **Pharmacists should serve on psychiatric patients' units.** *Hospitals*, Chicago, 1975, Sept. 16, vol. 49, no. 18, pp. 79-82.

The pharmacy at the University of Connecticut Health Center has provided clinical

pharmacy services to patients since the centre's foundation in 1968. An important element in the delivery of services to patients in the 25-bed psychiatric unit is the presence of a pharmacist in the patient care area. His responsibilities include: determining patient medication needs within the framework of the overall treatment plan; co-ordinating the reporting of all adverse drug reactions; supervision of all aspects of drug distribution; patient counselling in medication history and discharge reviews; and staff education.

97. COLES, J., ROFF, G. A. and POLLARD, R. **A remote document reader using closed circuit television.** *Pharmaceutical Journal*, London, 1975, Nov. 15, vol. 215, no. 5844, pp. 505-506.

A closed circuit television system has been installed at St. Thomas' Hospital, London, which allows prescriptions to be dispensed in the hospital pharmacy without prescription sheets leaving the wards. Six wards in the hospital are equipped with readers linked by coaxial cable (for image transmission) and a six-way cable to two monitors in the pharmacy department. Each reader incorporates a television camera. Direct voice communication with the pharmacy is always available. A system of this size costs £12,000 exclusive of wiring but smaller systems are available. The advantages of the system are: prescription sheets remain on the ward; the system is simple and easy to use; the method is error-free; and time is saved on the wards. It will be particularly useful in hospitals where services are widely separated and staff cannot be spared for unnecessary tasks. The system has also been adapted for use in the reporting of laboratory tests.

98. BEANLAND, W. A. **A new approach to labelling.** *Pharmaceutical Journal*, London, 1975, Nov. 15, vol. 215, no. 5844, pp. 507-509.

The labelling of dispensed medicines is in urgent need of updating; this has caused the Pharmaceutical Society to arrange discussion meetings calling for reforms in labelling and presentation. A labelling system, using a typewriter and forms of various sizes, that are produced as and when required, is described. The system is clear and unambiguous and the instructions are permanent and easily read by the patient. Labels are printed with a variety of wordings, and for ease and speed self-adhesive labels are used in sheets. The advantages of the system are: (i) improved appearance of the dispensed medicine; (ii) clear, easily read labels; (iii) full instructions are given on separate labels attached to only one face of the container; and (iv) the system is quick and easy to use. The disadvantages are: (i) the problem of storing a large number of labels; (ii) high initial cost; (iii) inability of the specialist pharmacy label printer to adapt to the system; and (iv) need for high printing orders.

LABORATORIES

See also Abstract No. 22

99. OSWALD, N. C. and others. **Survey of the sputum cytology service in England and Wales.** *Thorax*, London, 1975, Oct., vol. 30, no. 5, pp. 489-496.

The development of sputum cytology as an aid to clinical diagnosis has led to the provision of a service for routine cytological testing in many laboratories. The present

investigation was undertaken to determine the overall development of sputum cytology in England and Wales, including staffing, laboratory procedures, the number of specimens and patients tested, the reported results and estimates of the cost. The conclusions were: (i) an improved service might best be provided by district general hospital laboratories testing at least 1,000 specimens a year, thus ensuring a high level of accuracy; and (ii) much of the microscopy might be done by non-medical graduates and technicians under the supervision of pathologists.

100. LAPIDUS, B. M. and DEHNER, G. F. **Gravity delivery of laboratory specimens.** *American Journal of Clinical Pathology*, Philadelphia, 1975, July, vol. 64, no. 1, pp. 127-135.

The feasibility of a gravity transport system was established by experiments, whose results are tabulated, on the effects of container size, weight, length and diameter and an open/closed tube. A practical operating speed of less than 120 cm. per second was maintained using specimen containers closely fitting a pipe system which has both ends closed. Design experiments were carried out using standard commercially available metal or plastic piping providing design data for a prototype system.

101. Die Automation im ärztlichen Laboratorium. [**Automation in the medical laboratories.**] *Arztliche Laboratorium*, Berlin, 1974, Dec., vol. 20, no. 12, pp. 397-436.

This issue contains eight papers given at the Congress for Laboratory Medicine, Giessen, March 1974. In addition to general papers on electronic data processing in laboratories, there are papers on: a new system based on a Prime 300 central processor; quality control and electronic data processing; economic aspects; use of electronic data processing in daily routine work; and planning the system at Giessen University. The papers are all in German, with summaries in English.

102. **Symposium on computer applications in the clinical laboratory.** *American Journal of Medical Technology*, Bellaire, Tex., 1975, June, vol. 41, no. 6, pp. 211-244.

This issue contains the papers given at a symposium presented at the 1974 annual meeting of the American Society for Medical Technology. There are papers on: basic computer technology; hardware and software considerations; the Xerox data system at M.D. Anderson Hospital and Tumor Institute, Houston, Tex.; the DNA automated clinical laboratory system; the BSL system at Denver General Hospital; the LCI system at the Hershey (Penn.) Medical Center; the Spear Clas-300B system at Saint Margaret Hospital, Hammond, Ind.; and the System 2000.

103. CARTER, P. M. and others. **The horns of the pathological dilemma.** *Hospital and Health Services Review*, London, 1975, Oct., vol. 71, no. 10, pp. 346-350.

There is a constantly growing demand for laboratory tests and the training of pathologists cannot keep pace with this. It has been suggested that the recruitment of medically trained pathologists might improve if they were offered more clinical work away from the laboratory but it may be difficult to attract non-medical staff to replace them; at the same time there is a need for greater clinical capacity in the laboratory

rather than less, so that critical evaluation of the necessity for tests can be made. Pathology departments should perform service investigations for one or more of four reasons: (i) to help make a diagnosis; (ii) to document objectively a condition or diagnosis which may be obscured later by treatment; (iii) to help indicate treatment; and (iv) to help evaluate treatment. The responsibilities of the head of a pathology department within the department are the standard managerial ones; in addition he must ensure that his department's results are sufficiently accurate to allow confident clinical decisions and that results are reported with a speed commensurate with the clinical situation. Outside the department the medically trained pathologists can advise on the selection and interpretation of investigations. Some degree of centralization of laboratories may be desirable but if they become too large the communication between clinician and pathologist lessens and the likelihood of unnecessary tests being performed increases. For general pathology services centralization further than district level is likely to be counter-productive.

104. HERCZ, L., LASZLO, A. and REESAL, M. R. **A computerized information system for pathology.** *Methods of Information in Medicine*, Stuttgart, 1975, Oct., vol. 14, no. 4, pp. 182-188.

This paper describes a computerized information system for pathology (CISP) capable of storing, retrieving and correlating essential information in pathology reports. The system was conceived in its prototype form for Montreal General Hospital with provision to include all McGill University teaching units. Reports are entered in text form using established diagnostic terms recognizable in the systems dictionary. Although some pre-editing of the report may be necessary, the comprehensive dictionary minimizes this effort. Dictionaries provide the vocabulary for a language which enables an economic storage of essential information in a compact and easily retrievable form. Reports and dictionaries stored on a disk form the system's data base. CISP consists of a set of modules shared by a number of specific load module programs which store reports, retrieve them, and process requests. The system was programmed in PL/1 on the IBM 360/75 OS computer system. CISP is operated from terminals situated in the hospital.

105. BARTLETT, R. C. **Control of cost and medical relevance in clinical microbiology.** *American Journal of Clinical Pathology*, Philadelphia, 1975, Oct., vol. 64, no. 4, pp. 518-524.

The United States government and third party organizations are bringing pressure to bear on laboratories by cutting down budgets in an attempt to control rising medical laboratory costs. This restriction affects the quality of work in clinical microbiology where a lack of automation has prevented greater productivity. A solution was sought by curtailing work on duplicates and specimens of poor quality by using empirically derived objective criteria in an attempt to increase productivity. By using this method together with other controls, the laboratory costs of Hartford (Conn.) Hospital were reduced by 12 per cent. Simultaneously, preliminary reports of direct smears were provided for most specimens and telephone reports were given when processing was incomplete, to allow prompt resubmission of specimens. Public pressure to reduce costs provides an incentive to develop policies to improve the quality and the usefulness of the information whilst allocating the resources more efficiently.

106. LADENSON, J. H. **Patients as their own controls: use of the computer to identify 'laboratory error'.** *Clinical Chemistry*, Winston-Salem, 1975, Oct., vol. 21, no. 11, pp. 1648-1653.

A system of quality control based on computer detection of changes in individual patient test results was used to scan all the tests on patients performed by the clinical laboratory in a 1,200-bed hospital. The system, called 'delta check', indicated that over a period of 22 months specimen misidentification was a serious problem in the laboratory; the most frequent errors were in the results for total thyroxine, total calcium and total protein. The 'delta check' method was able to detect mistakes which had passed undetected by other currently used methods of quality control, and consequently appears to be an asset to the laboratory.

BLOOD TRANSFUSION DEPARTMENT

107. PEGELS, C. C. and others. **A computer-based interactive planning system for scheduling blood collections.** *Transfusion*, Philadelphia, 1975, July/Aug., vol. 15, no. 4, pp. 381-386.

Seasonal imbalances between supply and demand for blood products are common. This paper describes a planning system which uses conversational computer facilities to assist the manager of a regional or community-wide blood bank in scheduling mobile and static blood collections from one to 18 months in advance. The benefits from changes to only one day of a collection schedule recover the annual costs of using the system, estimated at $600 for a service which collects 65,000 units annually.

108. BRODHEIM, E., DERMAN, C. and PRASTACOS, G. **On the evaluation of a class of inventory policies for perishable products such as blood.** *Management Science*, Providence, R.I., 1975, July, vol. 21, no. 11, pp. 1320-1325.

A statistical model, based on a Markov chain, is presented for inventory and distribution policies for scheduled deliveries of perishable products, subject to variable demand, and illustrated with reference to blood.

DIAGNOSTIC X-RAY DEPARTMENT

109. CABANIS, E.-A., LABORDE, J.-L. and IBA-ZIZEN, M.-T. Techniciens en chambre noire: un nouveau métier pour les non-voyants. **[Dark room technicians: a new profession for the blind.]** *Gestions Hospitalières*, Mantes, 1975, Aug./Sept., no. 148, pp. 601-603.

During the past year eight blind persons have been successfully trained to carry out the duties of a darkroom technician in the new clinic of the Quinze-Vingts National Centre of Ophthalmology. They have learnt to clean and maintain the machines, to develop films, marking them where necessary, and to renew the solutions in the developing and fixing baths. Only two minor errors—in loading the machines—have occurred. The authors discuss the possibility of opening up this new career to more blind people, particularly in the light of Decree No 73-1095, which lays down certain standards for the recruitment, training, and promotion of X-ray laboratory technicians.

110. AMBROSE, M. W. **MIS for radiology department.** *Journal of Systems Management*, Cleveland, 1975, Sept., vol. 26, no. 9, pp. 14-17.

Because of poor information, the physician and patient waste time, money and effort. There are particular problems with the availability of reports. In the radiology department these can be overcome by the use of information systems. This paper outlines such systems in use at Cincinnati General Hospital (an electromechanical random-filing system); the University of Missouri (based on an IBM 360-50 computer); and the University of Vermont (an on-line system using cathode ray terminals).

111. JAMES, W. B., FULTON, A. and REEKIE, D. **Initial experience with a small dedicated computer system in a diagnostic X-ray department.** *Clinical Radiology*, Edinburgh, 1975, Oct., vol. 26, no. 4, pp. 555-560.

Following a pilot study a small on-line computer was installed in the diagnostic X-ray department of the Southern General Hospital, Glasgow, in August 1973. The system consists of the following equipment: PDP8/F central processor with 8K core storage; 32K magnetic disc storage; high-speed paper tape reader (300 characters) and punch (50 characters); and three Olivetti TE 318 terminals with sprocket platen, paper tape reader and punch (10 characters)—one terminal for input and two for report production. The capital cost of the configuration was less than £12,000. The system stores patient data relating to name, address, age, ward, referring doctor, examinations requested and dates of request, examination and report. These data can provide a large volume of relevant statistics for the department and for the health authority. Identifying labels for films, etc., are automatically typed as is a 'day book' at the end of each working day. During reporting coded phrases can be used by the radiologist. The installation has, in general, proved highly successful and has improved the quality of documentation without the need for extra staff. The advantages to the health authority cannot be predicted exactly but it seems likely that the statistics provided will help to improve day-to-day and long-term management especially with regard to patient movement, machine use and the use of staff time.

REHABILITATION

112. HEALTH AND SOCIAL SERVICE JOURNAL and HOSPITAL INTERNATIONAL. **Rehabilitation; editor, A. R. J. Wise.** London, Health and Social Service Journal/ Hospital International, 1975, 48pp. £1.50.

The 16 papers in this book examine various aspects of rehabilitation, including the role of the remedial professions, rehabilitation after several disorders, costs and design considerations.

PHYSIOTHERAPY DEPARTMENT

113. NORMAN, P. and others. **Access by general practitioners to physiotherapy department of a district general hospital.** *British Medical Journal*, London, 1975, Oct. 25, vol. iv, pp. 220-221.

Although there has been much opposition to general practitioner access to hospital

rehabilitation services, Horton General Hospital, Banbury, operates its physiotherapy department on open access principles. The work load for five years is reviewed. Co-operation between the general practitioners, physiotherapists and consultant has provided a highly efficient service. The scheme has been welcomed by the general practitioners as it supplies prompt treatment for their patients; physiotherapists are also in favour of the scheme as it enables them to minimize disability by treating musculo-skeletal disorders at an early stage. Limited hospital resources are used to the greatest advantage to maintain a prompt assessment and treatment service. The scheme is also expected to reduce the pressure on hospital-based out-patient clinics.

DEPARTMENTS FOR SPECIAL THERAPY

See also Abstract Nos. 64, 71, 143, 149

114. SHAH, C. P., BAIN, H. W. and MARTIN, M. G. **Poisoning and poison control centres in Canada.** *Canadian Medical Association Journal*, Ottawa, 1975, Sept. 20, vol. 113, no. 6, pp. 523-524, 527, 530.

This study examines the magnitude of the problem of poisoning in Canada, the staffing pattern of poison control centres and parental knowledge of the centres. In 1972 the 310 centres in Canada reported 53,531 enquiries about poisoning, 40 per cent in adults. Of 100 centres who completed a questionnaire, two-thirds were staffed by 'any nurse in the emergency room', most of whom had received no training to answer the telephone enquiries. However, two-thirds agreed that a training programme is needed. Only 6.7 per cent of 223 parents of children attending a general medical clinic stated that they would call a poison control centre if their child had accidentally swallowed a large amount of a poisonous substance. Among the steps recommended are: regionalization of centres; a training programme for staff answering telephone enquiries; the need for crisis intervention as part of a poison control programme; and public education about poisoning and poison control centres.

115. ROBINSON, G. E. **The establishment of a rape crisis centre.** *Canada's Mental Health*, Ottawa, 1975, Sept., vol. 23, no. 5, suppl. pp. 10-12.

Because of the increase in cases of rape in Metropolitan Toronto the Community Psychiatry Team of Toronto General Hospital has organized a Rape Crisis Centre. A group of 40 women volunteers operate a 24-hour telephone answering service. They attend educational sessions with the police, lawyers, gynaecologists and the Community Psychiatry Team and are introduced to the hospital administration, gynaecology department, police, attorney's office, emergency department and nursing staff. Volunteers are sent out to pick up any victim of an attack and take her to the hospital. Here a smooth running programme enables the woman to be examined medically and psychiatrically and to be questioned by the police in surroundings less intimidating than the police station. The volunteers keep in touch with her, with consultations with the Community Psychiatry Team, for as long as necessary, including going with her to court. Other aims of the Centre include research into rape, the rapist and the victim, together with education of the public regarding the crime. It took nine months of continuous effort to establish a smoothly running centre. Organizational and

administrative problems had to be dealt with, the bias of the lay worker to the professional and vice versa had to be overcome, and the many fantasies and negative feelings towards the victim of such a crime as rape had to be understood. At present the Centre seems to be functioning smoothly and the hospital involvement is being efficiently handled.

116. WING, A. J. and MAGOWAN, M. **The renal unit.** London, Macmillan, 1975, x, 281pp. £12.50.

The specialist nurse in a renal unit must be competent, knowledgeable and understanding: this book is an introduction to what she will need to know and what she will be teaching her patients. It has chapters on: renal function and its replacement; history of dialysis and transplantation; principles of dialysis; peritoneal dialysis; shunts and fistulae; haemodialysis principles and equipment; haemodialysis technique; medical aspects of regular dialysis treatment; hepatitis in dialysis units; dialysis in the home; dialysis and transplantation; and working in a dialysis unit.

INTENSIVE CARE UNITS

117. ROLFE, P. **Monitoring in newborn intensive care.** *Biomedical Engineering*, London, 1975, Nov., vol. 10, no. 11, pp. 399-404, 413.

The distinguishing feature of neonatal and adult intensive care is the importance in the former of respiratory problems requiring intensive surveillance and support, which is generally of secondary importance to specific cardiac disturbances in the latter. Impaired gas exchange in the lungs, together with disturbed breathing patterns, which may include the temporary cessation of breathing, are characteristic of respiratory diseases in pre-term infants. New monitors continue to be introduced. The recent development of means for the continuous measurement of arterial oxygen in the newborn, thus allowing dangerously high and low oxygen levels to be avoided, represents a significant advance in physiological measurement and neonatal intensive care. A list of 87 references to the literature is included.

118. ROYAL COLLEGE OF PHYSICIANS OF LONDON and BRITISH CARDIAC SOCIETY. **The care of the patient with coronary heart disease: report of a joint working party.** *Journal of the Royal College of Physicians of London*, London, 1975, Oct., vol. 10, no. 1, pp. 5-46.

The objective of this working party was to review the present position of coronary care in its widest aspects, with particular reference to the United Kingdom. Nine aspects of coronary care are considered and recommendations on them made: epidemiology; notification of coronary heart disease; diagnosis and management of presymptomatic coronary heart disease; the management of the patient after symptoms have developed; coronary care outside the hospital; the coronary care unit; management after cardiac infarction; surgical management of coronary heart disease; and the future. A list of 119 references to the literature is included.

SPECIAL HOSPITALS AND UNITS

OUT-PATIENT

See also Abstract Nos. 39, 45, 131, 132, 140

119. **The Family Practice Clinic at Cook County Hospital, Chicago, and some issues in the differential use of staff in a health care team.** *International Social Work*, Bombay, 1975, vol. 18, no. 3, pp. 58-63.

The Family Practice Clinic at the Cook County Hospital, Chicago, was opened in 1972 and aims to provide a scientific and human approach to the patient, presenting a multidisciplinary approach whilst preserving continuity of care. It is staffed by physicians, medical nurse associates and medical social workers. The Clinic provides the staff with an opportunity to expand their knowledge of disciplines complementary to their own, and to develop greater communication links. The clinic offers a teaching scheme closely linked to the work of the physician, fragmentation of clinics is avoided and the patient's case is assessed as a whole. This is the first family practice clinic to have been established and is considered as a model for future developments.

120. SIBOLE, W. R. **Developing regional programs for ambulatory care facilities.** *Hospital Administration in Canada*, Don Mills, Ont., 1975, Sept., vol. 17, no. 9, pp. 25, 27.

The author presents a basic guideline for the development of a regional ambulatory care programme. The population distribution of the region must first be obtained and then an indication of the expected number of visits to ambulatory care facilities (whether to a hospital or a doctor's surgery). The latter are not generally available but a study done in the north eastern part of the United States could serve as a guide. The next step is to estimate regional capabilities. Figures are given for a hypothetical region of 2,500,000 and it is expected that there would be an average of about 4.4 visits per person per year to ambulatory care facilities of some kind. Family doctors, numbering about 4,000 could cover about 10 million visits but the remaining number, just over one million, would have to be distributed strategically over the 35 hospitals in the area. Three factors will influence this distribution: (i) referral population for each hospital; (ii) distribution of doctors' surgeries; and (iii) the nature of the specific clinics to be provided. Ambulatory care might in future be classified in the same way that in-patient care is—for example, every community hospital might have a fracture clinic, secondary care (ophthalmics, plastic surgery, etc.) would be less frequently provided and tertiary level care (cancer clinics, orthopaedics, etc.) would be available only at a few special centres. The specific characteristics of a region must be carefully considered to develop national distribution.

121. RAPIN, M. and PORTOS, J.-L. Le département d'accueil et d'orientation des malades externes de l'hôpital Henri-Mondor. **[Department for the reception of out-patients, Henri-Mondor Hospital.]** *Techniques Hospitalières*, Paris, 1975, June/July, vol. 31, nos. 357/358, pp. 39-40.

This department was established to care for and guide patients who arrive at the hospital without precise directions, and as a result of criticisms of reception services in

public hospitals. It was formed by co-ordinating emergency, short-stay and out-patient services. The first two consist of nurses' and hostesses' offices, waiting, examination and treatment rooms on the ground floor and a 37-bed short-stay surgical and medical ward on the first floor. The out-patient service includes consulting rooms for patients with or without appointments, a day hospital with five beds, and examination rooms. In the emergency service, a team consisting of a doctor, two medical students, a secretary and a social worker screens patients and directs them to the appropriate service according to their needs. Each week a co-ordinating meeting is held for medical and nursing staff.

CASUALTY AND ACCIDENT

See also Abstract No. 121

122. RUTHERFORD, W. H. **The inter-related problems of an accident service and the accident and emergency department.** *Injury*, Bristol, 1975, Nov., vol. 7, no. 2, pp. 96-100.

An accident service and an accident and emergency department are two very different entities; however there is a wide overlap of interests and organizational problems. Two hospital wards were analysed in 1972, the surgical ward of the Royal Victoria Hospital, Belfast, and the plastics ward in the Ulster Hospital, Dundonald, and the problems were highlighted. It was concluded that the best patient care is only available for both fields when staff appreciate the importance of each service, for any problem or solution for either service has implications for the other. Fuller understanding of the spheres of work of other departments will lead to greater co-operation between services.

123. VASU, C. M. **Emergency medical care: a unique and proven system.** *Michigan Medicine*, East Lansing, 1975, May, vol. 74, no. 15, pp. 267-271.

Kent County has established a roving police emergency medical system to provide an emergency service to the community. The police department was selected as the logical choice for an emergency medical services system as police provide a 24-hour patrol service, and are trained to react reliably and quickly to any situation. A course was tailored to suit the needs of the staff, lasting four to five months, and a support team of physicians was on hand at all times. Three areas of responsibility are covered: (i) first aid and rescue; (ii) communication by radio to link hospitals and staff in the casualty unit; and (iii) transport of the patient. The police emergency unit through providing a 24-hour service can be on hand to deal with any emergency and maintains a close liaison between doctor and patient by radio. The use of such an emergency unit is unique and highly practical. A low-cost system is provided for the community with the maximum of efficiency and the minimum of confusion.

124. KOFF, S. Z. **Emergency medical services in crisis: an Italian case study.** *Milbank Memorial Fund Quarterly/Health and Society*, New York, 1975, vol. 53, no. 3, pp. 377-401.

A case study is prescribed of the organization and operation of the emergency medical services in the Tuscany region of Italy. Recent decentralization decrees have established regional governments with major responsibilities for health care, including emergency medical services. The effects of the historical development of established

emergency care agencies with charitable duties, and the political upheaval and dissent aroused concerning the provision of emergency services at regional level are discussed. Prospects for rational reform of emergency services appear bleak.

125. MANGOLD, J. H. **Authority and functions of the emergency services committee.** *Hospital Medical Staff*, Chicago, 1975, Oct., vol. 4, no. 10, pp. 14-17.

The activities of the emergency services committee are limitless with regard to the operation of the emergency department. Various functions and responsibilities are listed, together with the daily problems that confront the committee including: (i) emergency call list rota; (ii) teaching requirements; (iii) protocol for transfer of patients; (iv) review of deaths; (v) participation in emergency medical technician schemes; (vi) communication with outside organizations; (vii) co-operation with regional emergency services; (viii) equipment needs of the department; and (ix) design of systems. The committee can have a significant impact upon the care rendered in the emergency department and in the pre-hospital phase of emergency health care delivery. The committee also carries out quality control assessments in a field that has been neglected for some time.

126. ROUSSI, C. C. and MAXWELL, D. M. **An improved record system for the emergency department.** *Journal of the American College of Emergency Physicians*, East Lansing, Mich., 1975, Sept./Oct., vol. 4, no. 5, pp. 419-424.

A system designed to avoid many of the problems inherent in emergency department record keeping is in use at the Akron General Medical Center, Ohio. The system has two components: (i) a pad of 11 printed emergency record forms interleaved with carbon, which allows copies containing only the relevant information to be simultaneously produced for distribution to all departments; and (ii) a hand-held portable dictating machine with mini-cassettes, used by the physician to record each patient's history. The record is typed from the cassette by a typist based in the emergency department so that by the time the patient leaves the department a complete typewritten medical record of the visit has been produced. The layout of the pad of emergency forms is described. There has been an increase in efficiency coupled with a greater amount of detail in the patient's history as a result of the system, and each emergency physician now sees a larger number of patients than before.

127. ALBIN, S. and others. **Evaluation of emergency room triage performed by nurses.** *American Journal of Public Health*, Washington, 1975, Oct., vol. 65, no. 10, pp. 1063-1068.

An evaluation of the triage nurse system in operation at the Bronx (N.Y.) Municipal Hospital Center confirmed other reports that the emergency department in a hospital has become the primary centre for health care for a large number of people. Ideally the emergency department should be reserved for true emergencies; a triage system employing nurses can help towards this goal by distinguishing between these true emergencies and cases where primary care in a general clinic would be more appropriate. For the system to operate successfully, however, it is necessary to have specially trained triage staff and a continuous process of monitoring with retraining where necessary, as well as integrated, co-operating, general and specialized out-patient facilities.

128. KAUFMAN, T. and others. **Auditing care with a problem-oriented record system.** *Journal of the American College of Emergency Physicians*, East Lansing, Mich., 1975, Sept./Oct., vol. 4, no. 5, pp. 416-418.

Problem-oriented medical records were first introduced to the Beth Israel Hospital, New York, emergency department in 1973. Five factors had determined the change from source-oriented to problem-oriented records: (i) retrospective assessment was easier; (ii) logical sequences could be maintained at all times; (iii) failure to give the patient the correct treatment could be ascertained; (iv) more effective for auditing; and (v) there was a marked improvement in handwriting and record-keeping. Two studies confirmed the belief that problem-oriented charts were easier to audit and less tiring than source-oriented charts. Problem-oriented charts are a more effective method of auditing care and encourage a logical and structured approach.

129. RESNICK, R. and HERGENROEDER, E. **Children and the emergency room.** *Children Today*, Washington, 1975, Sept./Oct., vol. 4, no. 5, pp. 5-8.

The Pediatric Trauma Center (PTC) at the Children's Medical and Surgical Center of the Johns Hopkins Hospital, Baltimore, Md., was opened in 1971 so that children would not be exposed to the traumas of an adult emergency room. The PTC treats children from birth to 13 years for emergencies requiring surgical treatment. There is a lack of information on emergency room care for children, so a pilot study was conducted in August 1973 on 100 children, chosen at random, between the ages of three and 13, to discover more about children's reactions in emergency situations. The study reveals much about children, parents and their interaction under a stress situation, and five main factors have evolved: (i) the importance of play to hospitalized children forms a vital part of care; (ii) the psychological treatment of parents may be as important as the medical treatment of the child; (iii) children react more positively when explanations are given prior to treatment; (iv) emergency room staff members should be included in conferences and meetings; and (v) more research is needed into children's reactions under stress.

CHEST

130. CHRISTIAN, W. Entwicklung und Struktur der Tuberkulose-Krankenhäuser. **[Development and structure of tuberculosis hospitals.]** *Bundesgesundheitsblatt*, Berlin, 1975, Oct. 31, vol. 18, no. 22, pp. 357-361; English summary p. 361.

At the end of 1973, there were 120 tuberculosis hospitals and a total of 22,500 beds for tuberculosis patients in the Federal Republic of Germany. Two-thirds of the tuberculosis hospitals have less than 200 beds. Of the beds in tuberculosis hospitals, 27 per cent are in Baden-Württemberg and 65 per cent are in hospitals maintained by public bodies. There are less than half the beds there were in 1960 due to the diminishing prevalence of tuberculosis. At the end of 1973 there were about 700 physicians, predominantly specialists, and about 3,000 nurses (excluding students). The proportion of foreign doctors and nurses is higher than the averages for all hospitals. In 1973 about 78,000 patients were treated as in-patients with a total of 5.9 million patient days; since 1966 the number of patients has decreased by 30 per cent and the average length of stay from 132 to 91 days. The average bed occupancy was 84 per cent. [This abstract has been prepared from a English summary of the paper.]

INFECTIOUS DISEASES AND ISOLATION

See Abstract No. 74

CHILDREN

See also Abstract Nos. 45, 64, 117, 129

131. WELLER, S. D. V. **Peripheral paediatric clinics: survey and medical audit.** *British Medical Journal*, London, 1975, Nov. 15, vol. iv, pp. 390-393.

The work of the paediatric clinics in nine general practitioner hospitals in country towns in the Bath Health District during 1972 was analysed with respect to the pattern of referrals and methods of management. No child suffered harm from being seen in a clinic without full laboratory and X-ray facilities. Nearly 98 per cent of the consultations were deemed, even with a long period of hindsight, to have been completely satisfactory. The tremendous benefit to the patients and their families of being seen in a hospital near their home has not meant a sacrifice of good medical treatment.

132. AMERICAN ACADEMY OF PEDIATRICS. **Criteria for evaluation of ambulatory child health care by chart audit: development and testing of a methodology: final report of the Joint Committee on Quality Assurance of Ambulatory Health Care for Children and Youth.** *Pediatrics*, Evanston, Ill, 1975, Oct., vol. 56, no. 4, suppl., pp. 625-692.

This supplement presents the final report of the Joint Committee. The background, methods of assessing quality and the methods of observation by chart audit are given, followed by the objectives, methodology, results and discussion of the findings. The Joint Committee on Quality Assurance produced 17 recommendations on the need to develop and implement new systems of health care and to consider further methods of medical record keeping so that the logic of health care can be better documented. Many tables and a bibliography with 72 references are included in the report.

GERIATRICS AND LONG-STAY

See also Abstract Nos. 10, 11, 38, 58, 59, 78

133. FANSHEL, S. **The welfare of the elderly: a systems analysis viewpoint.** *Policy Sciences*, Amsterdam, 1975, Sept., vol. 6, no. 3, pp. 343-357.

A method to analyse the health services offered to the elderly for policy purposes is suggested. The best policy is defined as that which maximizes the benefit of the services to the elderly, given budgetary and other controls. A scale has been devised to measure the 'benefit' to the elderly, consisting of a set of states describing the degree of their dependency. The scale is converted to a cardinal scale by assigning weights to the state; the weights are an expression of the social-value judgments of the administrators. Any alteration of weights over a period of time, as a result of intervention of the health services, indicates the benefit of the services. Mathematical techniques for relating benefit to cost, making a sensitivity analysis and modelling the flow of the elderly into and among institutions, can be used to devise the 'best' policy for the services.

134. WOOD, G. **Health care for the aged.** *Hospital Administration in Canada*, Don Mills, Ont., 1975, Sept., vol. 17, no. 9, pp. 28, 32, 34.

The purpose of this paper is to outline: (i) an organized approach through which programmes can be introduced to improve the quality of life of the aged and of the community in general; and (ii) a system of health care which would allow more effective continuing medical, nursing and other care services for the elderly. There are four basic factors relating to the welfare of the elderly: (i) income security; (ii) housing; (iii) social services and activities; and (iv) health care. In health care the aims should be to keep aged patients in hospitals and nursing homes only as long as is necessary and to group patients according to their medical and nursing care requirements. The responsibilities of the regional or district general hospital, through a department of geriatrics, would include follow-up services both medical and social, immediate unplanned readmissions, planned admissions, holiday readmissions to relieve the family, day hospital services, home care and health visiting, and nursing homes. In planned geriatric medicine patients would be admitted to an initial treatment ward for investigation and intensive treatment. Continuation care would consist of rehabilitation and nursing care in a general hospital to ensure access to all the necessary staff and services. Patients in long-stay chronic care units should be nursed in surroundings as homelike as possible. These need not be in the hospital itself but should be within easy distance for visiting hospital staff.

135. BRICKNELL, J. G. **Geriatric services study group.** *Nursing Times*, London, 1975, Oct. 16, vol. 71, no. 42, pp. 1676-1679.

This paper outlines the ideas and projects discussed by nurses and other professions and voluntary workers concerned for the welfare of the elderly, at 14 meetings held at the King's Fund Centre, London, between June 1971 and December 1974.

136. ELLIOTT, J. R. **Living in hospital: the social needs of people in long-term care.** London, King Edward's Hospital Fund for London, 1975, 84pp. £2.50.

This book is based on the experience and ideas of a number of people whose work includes the care of patients in long-stay hospitals. It suggests many ways in which the situation of such patients can be improved if the members and staff of health authorities will commit themselves to achieving change in their ordinary day-to-day life. The suggestions are grouped under the headings: reception and daily living; social climate; relationships; and medical, nursing and organizational problems.

137. OSWIN, M. **Children we keep in hospital.** *Action Magazine*, Horsham, 1975, Sept., pp. 6-9.

The paper considers the positive action being taken by various long-stay hospitals for handicapped patients. The Royal National Orthopaedic Hospital, Stanmore, is cited as a prime example, with the tradition of considering the patient as a whole, not merely a body needing treatment. The activities carried out at the Charing Cross and Goldie Leigh Hospitals are also outlined. However, there is the proviso that in order to make the various schemes succeed much effort has to be made by individual members of the staff. Once public interest is aroused the money for the schemes is usually readily available.

138. ROBINSON, W. **New unit for Stoke Mandeville.** *Nursing Mirror*, Sutton, Surrey, 1975, Oct. 30, vol. 141, no. 18, pp. 60-63.

A purpose-built hostel for 40 disabled men and women has been opened at Stoke Mandeville Hospital, Aylesbury, Bucks. Disabled patients no longer requiring acute care were formerly transferred to a 30-bed unit lacking many facilities for long-stay patients but now they are transferred to the Sir Ludwig Guttmann Hostel, which has two eight-bed areas, one for men and one for women, and 24 single rooms. In addition to 30 spinal injuries beds there is accommodation for 10 other disabled patients, who will be drawn either from the hospital or from the local area. The hostel is a permanent home for many, although it will offer short stays to those who, on account of a family crisis or holidays, will need temporary care. There are many facilities including large bathrooms, a vast living area, a well-equipped treatment room and a pleasant utility room. The routine is adjusted to suit the lives of the residents and there are few rules. The youngest resident is 18, and the majority are in the late twenties and early thirties. Only those with physical not mental handicaps can become residents. A large workshop is attached to the hostel, and there are hopes of obtaining work from local firms.

139. YEAGER, R. **Hospital treats patients at home.** *Modern Healthcare*, Chicago, 1975, Oct., vol. 4, no. 4, pp. 29-32.

Los Angeles County-University of Southern California Medical Center (LAC-USC) has reintroduced the house call system to improve the care provided to many low income, chronically ill patients. Benefits include lower use of emergency services; savings in costs and out-patient use; increased job satisfaction for professional staff; and a reduction of transport problems. There are 21,000 out-patients a week in LAC-USC but for the elderly, preliminary surveys suggest that home care is better and cheaper than a hospital environment. In one year physicians made 10,000 house calls, nurses 4,500, ancilliary workers 1,786 and home helps 4,760. Two-thirds of the patients were women, the average age was 68 and the average stay in the system was 11.3 months. The physicians bridge the institutional gaps by also carrying out a role as social worker, and educating the patient. All the home care physicians were in favour of the scheme as they could take a greater professional pride in the care of the patient.

140. BUSH, V. **Hospital bets its money on the elderly.** *Modern Healthcare*, Chicago, 1975, Sept., vol. 4, no. 3, pp. 55-60.

Abbott-Northwestern Hospital, Minneapolis, and Minneapolis Age and Opportunity Center (MAO), a consumer organization, have combined to operate a senior citizens' clinic. The hospital provides health care staff and equipment, and MAO supplies volunteers and professionals for a wide range of social services. This paper describes the development of the service and some of the problems encountered.

CANCER

See also Abstract No. 65

141. CRADDOCK, F. G. and HUSAIN, O. A. N. **A mobile cancer screening service.** *Nursing Mirror*, Sutton, Surrey, 1975, Oct. 30, vol. 141, no. 18, pp. 48-50.

A mobile cancer screening service has been established by the Women's National

Cancer Control Campaign (WNCCC). The main aims are: (i) publicity; (ii) health education; (iii) specific communication to particular population groups; and (iv) presentation of screening facilities in terms acceptable to the potential user. The health screening programmes are used for area health authority clinics, group practice health centres and for industrial and staff health centres. The cost is met by the authority, all preplanning is carried out by the WNCCC, and a follow up appointment is made for all patients who have clinical or cell abnormalities.

CARDIOLOGY

See Abstract No. 118

UROLOGY

See Abstract Nos. 71, 116

SURGERY

See Abstract No. 69

MATERNITY

See also Abstract No. 72

142. OSORIO, A., DIAZ ROSSELLO, J. L. and CAPURRO, H. **A rooming-in program for mothers and newborns.** *Bulletin of the Pan American Health Organization*, Washington, D.C., 1975, vol. 9, no. 2, pp. 129-134.

This paper describes the rooming-in programme at the Clinical Hospital, Montevideo. The objectives, procedures and advantages of the unit are outlined. It consists of an area of 80 sq.m. divided into 12 cubicles; adjoining it is a room for holding classes and mothers' meetings. No additional resources are required, and in fact the programme achieves a more rational distribution of existing resources as well as active participation by the mothers in caring for their babies. All newborn infants spend six hours in the observation unit beside their mothers; thereafter all those not requiring special intermediate or intensive care are transferred to the rooming-in unit. The need for a strong instructional component in the programme is stressed. [This paper also appeared in Spanish in: *Boletin de la Oficina Sanitaria Panamericana*, Washington, 1975, May, vol. 78, no. 5, pp. 391-396.]

143. HOCKEY, A. **The development of a genetic investigation centre at a maternity hospital.** *Medical Journal of Australia*, Sydney, 1975, Aug. 16, vol. ii, no. 7, pp. 256-258.

A genetic centre was established at King Edward Memorial Hospital for Women, Perth, in 1972 to investigate genetic aspects of stillbirths, neonatal deaths and mental handicap. The centre is situated in the maternity hospital to enable patients to be easily referred from other departments. The centre can provide counselling early enough to

prevent the birth of a second affected infant in high-risk groups. A variety of laboratory and other facilities in close proximity permit procedures for amniocentesis and ultrasound examination for prenatal diagnosis to be arranged in consultation with the hospital staff. The systems of appointment booking, the staff and record keeping are outlined. Various improvements are being considered to the centre, including a new genetic chart and increased social work assistance.

PSYCHIATRY

See also Abstract Nos. 10, 11, 31, 46, 95, 96

144. BARUCH, G. **When treatment fails.** *New Behaviour*, London, 1975, Oct. 2, vol. 3, no. 1, pp. 9-11.

A study of the progress of a group of patients through a psychiatric unit of a general hospital in a provincial town was designed to highlight their experiences and to document the decision-making processes of the unit. Such units were established to correct the inadequacies of the old psychiatric hospitals and, as such, little research has been carried out on them. The significance of the decrease in the large number of long-stay patients and the rise in the number of short-stay patients is considered. Several cases were analysed and, in view of his findings, the author did not consider much progress had been made from the original system used in psychiatric hospitals, regarding treatment and attitudes.

145. **A rural mental health delivery system.** *Hospital & Community Psychiatry*, Washington, 1975, Oct., vol. 26, no. 10, pp. 671-674.

The Four Corners Community Mental Health Center located in Southeast Utah was established in March 1972 to bring comprehensive community mental health services to a vast multi-ethnic region of 42,000 people with little experience of mental health care. The majority of the residents are white Mormons, but there are also native Americans, chicanos, and descendants of Greeks and other Southern Europeans. The main obstacles were long distances, cultural barriers and mistrust of mental health schemes. A diverse delivery system uses two central offices, nine satellite clinics and a psychiatric wing at a general hospital in Price. A five-bed psychiatric wing was added to the hospital. Outreach workers and indigenous volunteers help bridge the cultural barriers and take the services to the people.

146. SMITH, C. G. and KING, J. A. **Mental hospitals: a study in organizational effectiveness.** Lexington, Mass., D.C. Heath, 1975, xvi, 190pp. £8.00.

This book presents more extensive and systematic information about those factors which facilitate the rehabilitation potential of psychiatric hospitals. This is accomplished by examining a sample of state psychiatric hospitals selected so as to represent the entire United States. Following background material and a description of the research design and procedure, there are chapters on: an approach to organizational effectiveness; hospital effectiveness measures and control procedures; the work environment of the professional and nursing staff; communications and co-ordination; hospital organization; the hospital ward environment; and the hospital viewed as an integrated complex organization.

147. VELZEN, W. J. van and RONDE, A. C. de. Regionalisatie in de zwakzinnigenzorg. **[Regionalization of care of the mentally handicapped.]** *Ziekenhuis*, Utrecht, 1975, Aug. 6, vol. 5, no. 15, pp. 362-365.

At present services for mental health care are distributed unevenly throughout the Netherlands. The aim of regionalization is to combine all services required within one province and thus bring the available services closer to those who need them. Three methods of achieving regionalization are suggested: (i) new buildings in regions where there is a shortage of services; (ii) moving institutions from over-provided to under-provided regions; and (iii) building new institutions while simultaneously demolishing or reducing in size the old. Some problems of regionalization are briefly discussed. For all provinces institutions varying in size from 200 to 400 beds are recommended. Provinces short of beds should aim at a phased increase in the same proportion as their population increase plus five per cent. Provinces with too many beds should remain within the number of beds planned less a percentage in proportion to the number of patients treated who do not belong to the province. In this way considerable regionalization can be achieved over a decade without too much tension and loss of capital.

148. MILBY, J. B. **A review of token economy treatment programs for psychiatric inpatients.** *Hospital & Community Psychiatry*, Washington, 1975, Oct., vol. 26, no. 10, pp. 651-658.

A review of token economy schemes for psychiatric in-patients was carried out. Only studies that employed some control procedures within the evaluations were included. Token economies were most effective in modifying in-hospital work, personal care and some psychotic behaviour. An evaluation of all the schemes showed that the majority were poorly designed and lacked systematic follow-up data. Almost all studies failed to examine possible interactions between chemotherapy and the token economies. Studies that assessed token schemes to prepare patients for community life and reduce recidivism confirmed the effectiveness of token procedures. The author suggests the need for future studies to gather follow-up information in order to assess the long-term effects of the schemes. Further studies in various settings need to be carried out to eliminate attention and social interaction as major factors in the scheme, and there should be more studies with psychiatric patients other than chronic schizophrenics who have been studied almost exclusively.

149. **A unit for delivering multiple drug treatment and prevention services.** *Hospital & Community Psychiatry*, Washington, 1975, Oct., vol. 26, no. 10, pp. 663-666.

The drug dependence unit of the Connecticut Mental Health Center, New Haven, offers a wide range of treatment and educational services for drug-dependent individuals. The treatment includes methadone maintenance, long and short-stay therapeutic communities, a day programme for adolescents and a low-intervention scheme using narcotic antagonists. The unit treats individuals of 14 years of age and above who are taking narcotics, amphetamines, psychedelics or barbiturates. The catchment area includes 17 towns with a total population of over 500,000. The average age of applicants is 22. More than 2,400 patients have applied to take up one of the schemes for drug treatment, 1,600 have entered treatment and 550 are considered drug free. On an average day there are more than 475 patients.

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